BANG & OLUFSEN A/S
DK - 7600 STRUER
DENMARK

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CABLE ADRESS BANGOLUF

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Form. 7118

BEOMASTER 1001
TYPE 2504

SERVICE MANUAL

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TECHNICAL DATA — **Subject to change without notice**

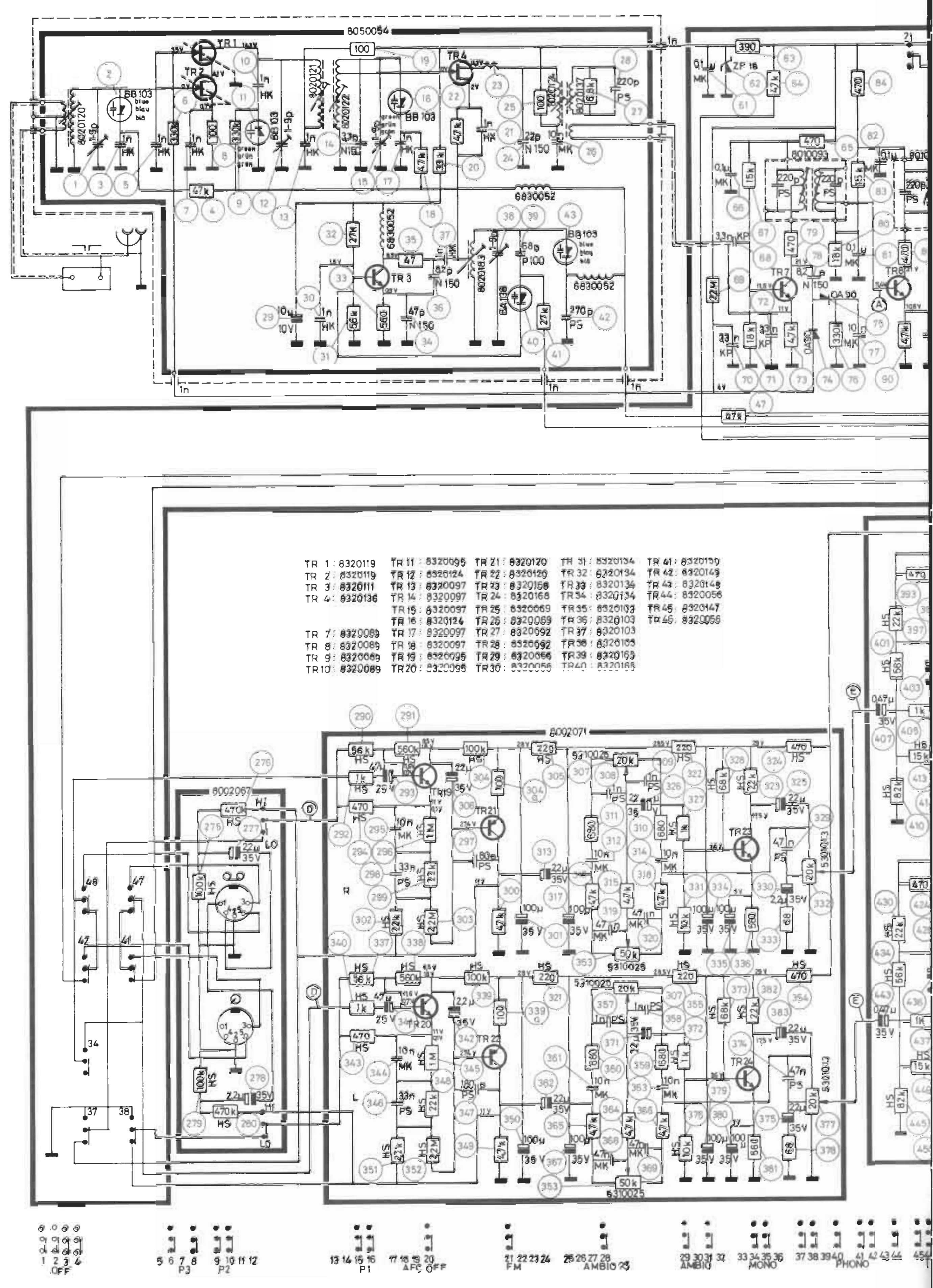
Amplifier	**Measured with bass and treble set for linear response**		**DIN 45 500 Requirements, page 6, ampl.**	**BEOMASTER 1001 type 2504**
Power Output	1000 Hz, at specified distortion (see Harmonic Distortion	RMS	2 X 6 watts	2 X 15 watts/4 ohms 2 X 13 watts/8 ohms
		Music	None	2 X 20 watts/4 ohms 2 X 16 watts/8 ohms
Speaker Impedance	Nominal		4 or 8 ohms	4 ohms
Harmonic Distortion	DIN 45 500 at 50 mW output 1000 Hz			< 0.3 %
	DIN 45 500 at rated output 1000 Hz		≦ 1 %	< 0.5 %
Intermodulation	DIN 45 500, page 6		≦ 3 %	< 1.0 %
Frequency Response	DIN 45 500, ± 1.5 dB		40 - 16,000 Hz	20 - 35,000 Hz
Power Bandwidth	DIN 45 500, 1 % distortion		40 - 12,500 Hz	20 - 20,000 Hz
Damping Factor	DIN 45 500, 1000 Hz		≧ 3	> 11
Inputs	Sensitivity at specified output, 1000 Hz	Pickup low impedance. Tape recorder	≦ 5 mV/≧ 47 kohm ≦ 500 mV/≧ 470 kohm	3.5 mV/47 kohm 200 mV/470 kohm
Signal-to-noise ratio	DIN 45 500 50 mW output	Pickup low impedance Load impedance 1.2 kohm Tape recorder Load impedance 4.7 kohm	≧ 50 dB	⩾ 56 dB > 60 dB
	At specified output, linear measurement	Pickup low impedance Load impedance 1.2 kohm Tape recorder Load impedance 4.7 kohm	None	> 55 dB > 65 dB
Channel Separation	DIN 45 500 Between channels all inputs Load impedance: Pickup, low impedance 1.2 kohm, other inputs 4.7 kohm	1000 Hz and 250 - 10,000 Hz	≧ 40 dB ≧ 30 dB	> 50 dB > 40 dB
	DIN 45 500 Between inputs, load impedance: Pickup, low impedance 1.2 kohm, other inputs 4.7 kohm	1000 Hz and 250 - 10,000 Hz	≧ 50 dB ≧ 40 dB	> 65 dB > 55 dB
Outputs	DIN 45 500 Signal voltage at specified input voltage, 1000 Hz	Tape recorder	0.1 - 2 mV per 1 kohm load impedance (1 - 50 kohm)	40 mV at 80 kohm output impedance
Bass Control	Measured at 40 Hz		None	± 17 dB
Treble Control	Measured at 12,500 Hz		None	± 14 dB

FM Tuner	**Measured at 94 MHz, modulation, 1000 Hz**		**DIN 45 500 Requirements, page 2, FM Tuners**	**BEOMASTER 1001 type 2504**
Range			None	87.5 - 104 MHz
Sensitivity	26 dB signal-to-noise ratio deviation 40 kHz IEC filter curve 123/A		None	< 1.8 µV at 75 ohms
	30 dB signal-to-noise ratio IHF		None	< 3.5 µV at 75 ohms
Limiting	– 3 dB, deviation 40 kHz		None	< 2.2 µV at 75 ohms
Signal-to-noise Ratio	DIN 45 500, page 2		≧ 54 dB	⩾ 65 dB
Selectivity	IHF ± 400 kHz			⩾ 20 dB
Frequency Range	DIN 45 500 ± 1.5 dB, pre-emphasis 50 µS		50 - 6,500 Hz	40 - 15,000 Hz
Harmonic Distortion	DIN 45 500		≦ 2 %	< 0.9 %
Stereo Channel Separation	DIN 45 500, page 2, measured at 1000 Hz Deviation 40 kHz		≧ 26 dB	⩾ 30 dB
Pilot and Carrier Suppression	DIN 45 500, page 2	19 kHz 38 kHz	≧ 20 dB ≧ 30 dB	⩾ 35 dB ⩾ 35 dB

Other Data			
Power Supply		AC Frequency Power consumption	110 - 130 - 220 - 240 V 50 - 60 Hz 15 - 120 watts
Dimensions	H X W X D		7.8 X 54.5 X 20.5 cm
Weight			6 kg

NOTES

BEOMASTER 100



TR 1: 8320119
TR 2: 8320119
TR 3: 8320111
TR 4: 8320136
TR 7: 8320089
TR 8: 8320089
TR 9: 8320089
TR10: 8320089
TR 11: 8320095
TR 12: 8320124
TR 13: 8320097
TR 14: 8320097
TR 15: 8320097
TR 16: 8320124
TR 17: 8320097
TR 18: 8320097
TR 19: 8320095
TR20: 8320095
TR 21: 8320120
TR 22: 8320129
TR 23: 8320168
TR 24: 8320168
TR 25: 8320069
TR 26: 8320069
TR 27: 8320092
TR 28: 8320092
TR 29: 8320056
TR 30: 8320056
TR 31: 8320134
TR 32: 8320134
TR 33: 8320134
TR 34: 8320134
TR 35: 8320103
TR 36: 8320103
TR 37: 8320103
TR 38: [illegible]
TR 39: 8320165
TR 40: 8320165
TR 41: 8320150
TR 42: 8320149
TR 43: 8320148
TR 44: 8320056
TR 45: 8320147
TR 46: 8320056
OFF
P3
P2
P1
AFC OFF
FM
AMBIO
MONO
PHONO

TRANSISTOROVERSIGT / TRANSISTOR CHART / ÜBERSICHT ÜBER TRANSISTOREN

	INDEX NR.														
TR1 TR2	8320119										U 1981 E	TIS 88 A	2N 5245		
TR3	8320111									BF 166					
TR4	8320136										U 1981 E	3C 2			
TR7 TR8 TR9 TR10	8320089								BF 194						
TR11	8320095	BC 169 B BC 184 B-L	BC 239 B BC 173 B	BC 184 B BC 549 B		BC 114	BC 109 B	BC 149 B							
TR12	8320124						BC 119								
TR13 TR14 TR15	8320097	BC 167 B BC 182 B-L	BC 182 B-K	BC 237 B		BC 207 B	BC 107 B	BC 147 B							
TR16	8320124						BC 119								
TR17 TR18	8320097	BC 167 B BC 182 B-L	BC 182 B-K	BC 237 B		BC 207 B	BC 107 B	BC 147 B							
TR19 TR20	8320095	BC 169 B BC 184 B-L	BC 239 B BC 173 B	BC 184 B BC 549 B		BC 114	BC 109 B	BC 149 B							
TR21 TR22	8320120	BC 214 B-L BC 259 B	BC 253 B	BC 214 B BC 559 B		BC 154	BC 179 B BC 263 B	BC 159 B							
TR23 TR24	8320168					BC 114									
TR25 TR26	8320069	BC 214 B-L BC 259 B	BC 253 B	BC 214 B BC 559 B		BC 154	BC 179 B BC 263 B	BC 159 B							
TR27 TR28	8320092	BC 167 B BC 182 B-L	BC 182 B-K	BC171 B BC 547 B			BC 107 B								
TR29 TR30	8320056					BC 113									
TR31 TR32 TR33 TR34	8320135						PNP / NPN BC 143 / BC 144								
TR35 TR36 TR37 TR38	8320103													2N 5034 2N 5035	
TR39 TR40	8320165	BC 212 A-L BC 257 A	BC 212 A-K		MPS 6517	BC153 BC 154	BC 177 A BC 261 A	BC 157 A							
TR41	8320150	BC 212 B-L	BC 252 B BC 212 B	BC 558 B	MPS 6518 MPS 6519	BC 153 BC 154	BC 178 B BC 262 B BC 260 C	BC 158 B							
TR42	8320149	BC 169 B BC 184 B-L	BC 173 B	BC 184 B BC 549 B	MPS 6520 MPS 6521	BC 114	BC 109 B								
TR43	8320148						BC 142								
TR44	8320056					BC 113									
TR45	8320147													60024	16503
TR46	8320056					BC 113									

TEKST TIL DIAGRAM / TEKST FOR CIRCUIT DIAGRAM / TEKST FÜR SCHALTBILD

Modstande uden angivelse: GBT 0,5 W
Kondensatorer mærket PS: Polystyren
Kondensatorer mærket MK: Metalliseret kunststof
Kondensatorer mærket KP: Plaquette
Kondensatorer mærket HK: "High K"
Kondensatorer mærket K: Keramik
De angivne spændinger er positive i forhold til stel. Dekoderens spændinger er målt med pilotsignal, de øvrige spændinger uden signal med FM knappen nedtrykket.
Følsomheder er målt med bas og disk. på 0 (Midterstilling).
LF følsomheder er målt ved 50 mW output.
FM følsomheder er målt ved 5 W output Δf = 22,5 kHz, f mod. = 400 Hz.
A: 70 µV (10,7 MHz) gennem 0,1 µF, Rg = 75 ohm.
B: 1,2 mV (10,7 MHz) gennem 0,1 µF, Rg = 75 ohm.
C: 50 mV (10,7 MHz) gennem 0,1 µF, Rg = 75 ohm.
D: 0,2 mV Lav ohm
10 mV Høj ohm
E: 10 mV
F: 5 mV (Tomgangsstrøm)

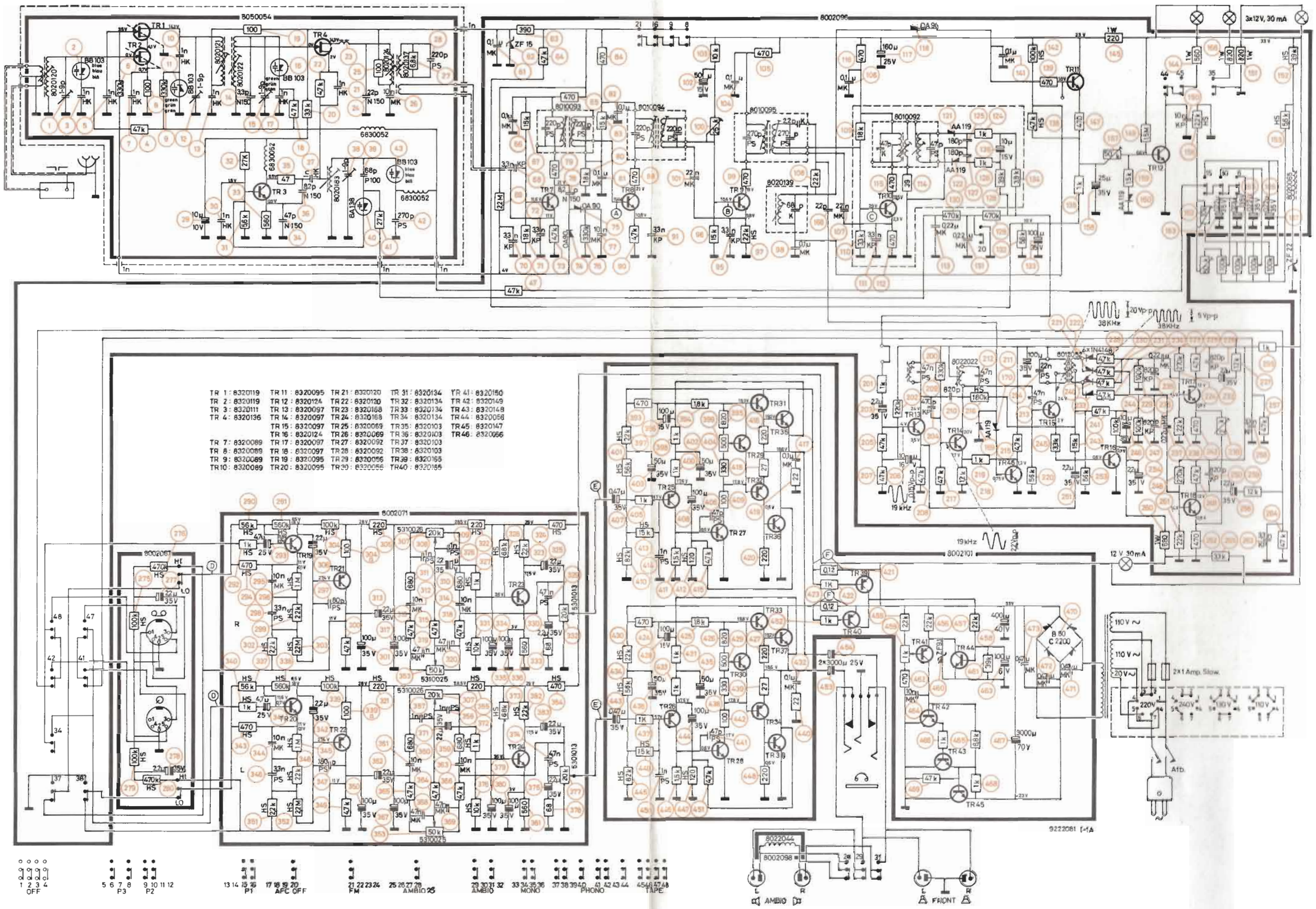
Ret til ændringer forbeholdes.

Resistors without designation: GBT 0,5 W
Capacitors marked PS: Polystyren
Capacitors marked MK: Metallized plastic
Capacitors marked KP: Plaquette
Capacitors marked HK: "High K"
Capacitors marked K: Ceramic
Voltages given are positive with respect to chassis. The voltages of the decoder are measured with pilot signal, the rest of the voltages are measured without signal with the FM button depressed.
Sensitivities should be measured with Bass and Treble in pos. 0 (middleposition).
AF sensitivities are measured at 50 mW output.
FM sensitivities are measured at 5 W output,
Δf = 22,5 kHz, f mod. = 400 Hz.
A: 70 µV (10,7 MHz) through 0,1 µF, Rg = 75 ohm
B: 1,2 mV (10,7 MHz) through 0,1 µF, Rg = 75 ohm
C: 50 mV (10,7 MHz) through 0,1 µF, Rg = 75 ohm.
D: 0,2 mV Low ohm
10 mV High ohm
E: 10 mV
F: 5 mV (no load current)
Subject to change without notice.

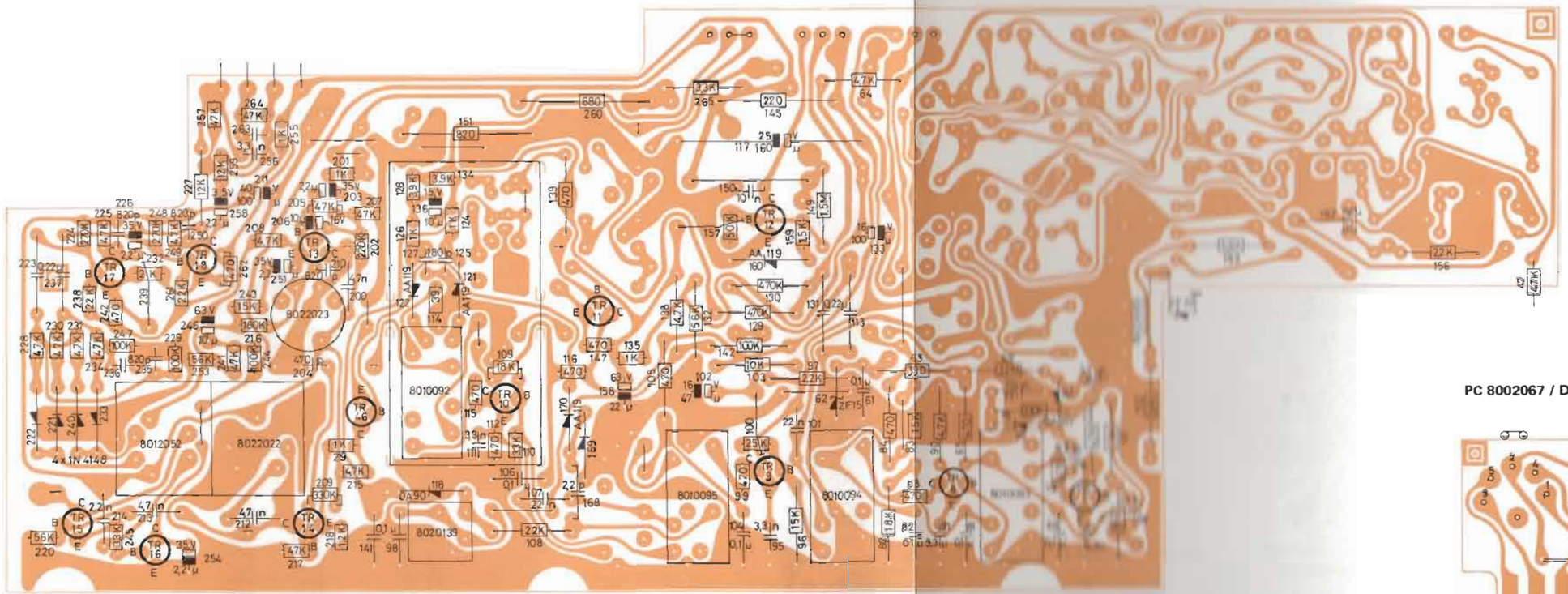
Widerstände ohne Angabe: GBT 0,5 W
Kondensatoren gekennzeichnet PS: Polystyren
Kondensatoren gekennzeichnet MK:Metallisierter Kunststoff
Kondensatoren gekennzeichnet KP: Plaquette
Kondensatoren gekennzeichnet HK: "High K"
Kondensatoren gekennzeichnet K: Keramik
Die angegebenen Spannungen sind positiv im Verhältnis zur Masse.
Die Spannungen des Stereodekoders sind mit Pilotsignal, die übrigen Spannungen ohne signal auf UKW gemessen.
Die Empfindlichkeiten sind mit Tiefen und Höhen in Stellung 0 gemessen (Mittelposition).
NF-Empfindlichkeiten sind bei einer Ausgangsleistung von 50 mW gemessen.
UKW-Empfindlichkeiten sind bei einer Ausgangsleistung von 5 W gemessen.
Δf = 22,5 kHz, f mod. = 400 Hz
A: 70 µV (10,7 MHz) durch 0,1 µF, Rg = 75 Ohm.
B: 1,2 mV (10,7 MHz) durch 0,1 µF, Rg = 75 Ohm.
C: 50 mV (10,7 MHz) durch 0,1 µF, Rg = 75 Ohm.
D: 0,2 mV Nieder Ohmig.
10 mV Hoch Ohmig.
E: 10 mV
F: 5 mV (Ohne Signal).

Änderungen vorbehalten.

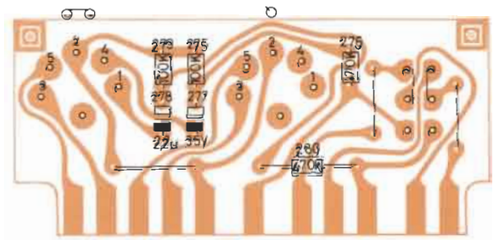
BEOMASTER 1001, TYPE 2504



PC 8002096 / MF-DEKODER / IF-DECODER / ZF-DECODER



PC 8002067 / DIN STIK / DIN SOCKET / DIN STECKER



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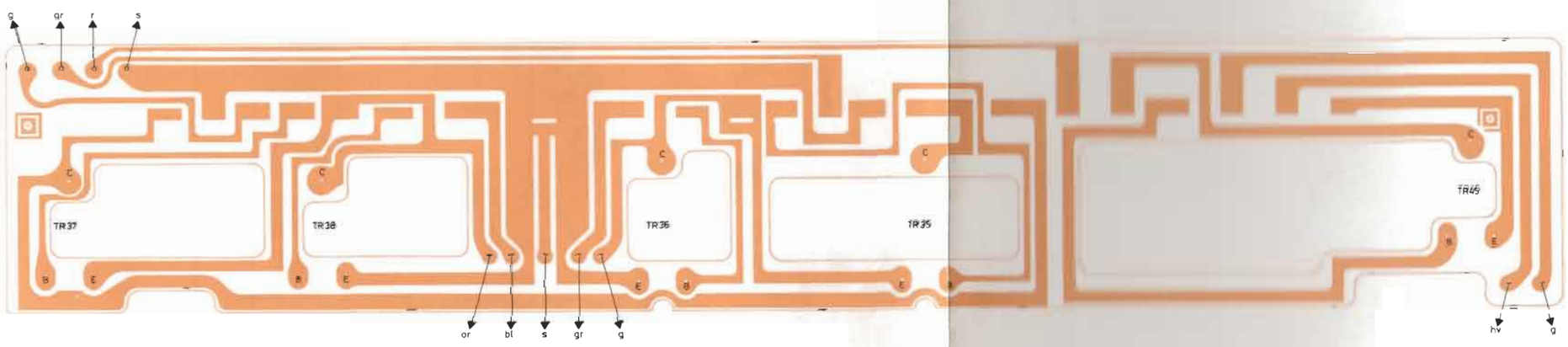
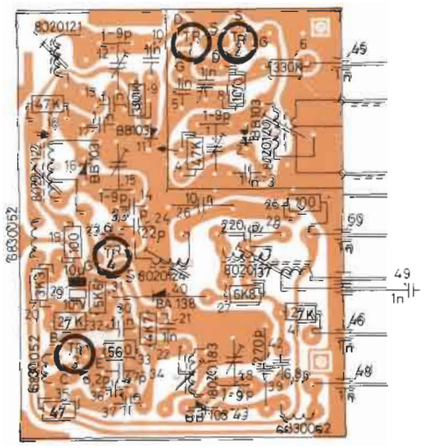
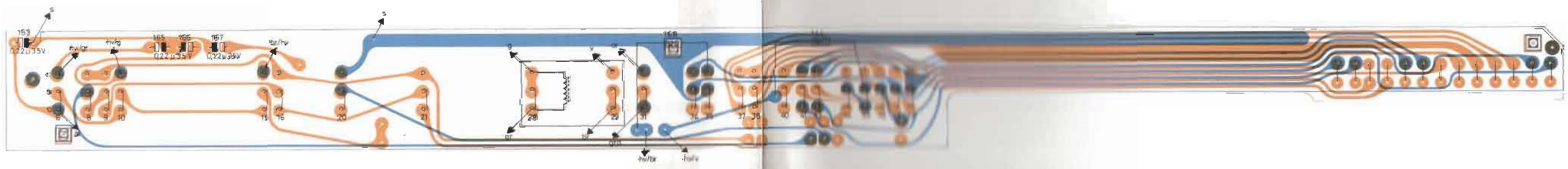


TUNER / FRONT END – 8050054

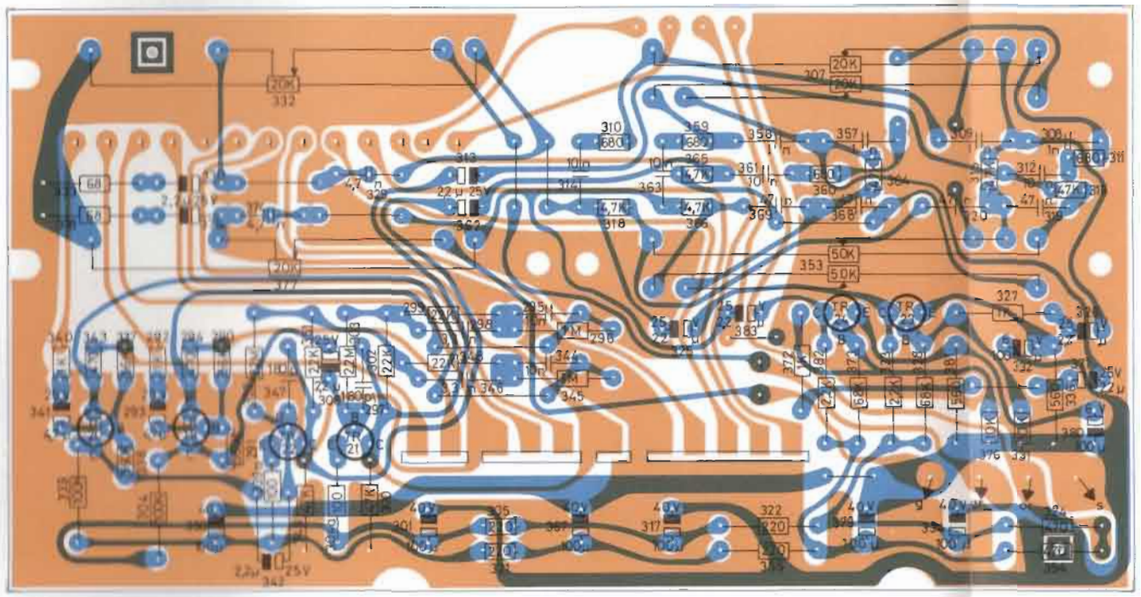


PC 8002097 / OMSKIFTER / SWITCH / UMSCHALTER

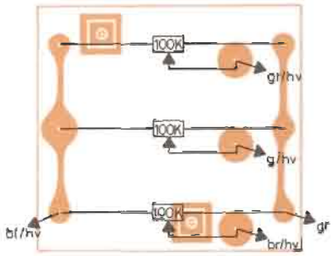


PC PLADER SET FRA PRINTSIDE / SEEN FROM CONDUCTOR SIDE / PRINTPLATTEN VON DER LEITERSEITE AUS GESEHEN

PC 8002071 / FORFORSTÆRKER / PRE-AMPLIFIER / VORVERSTÄRKER

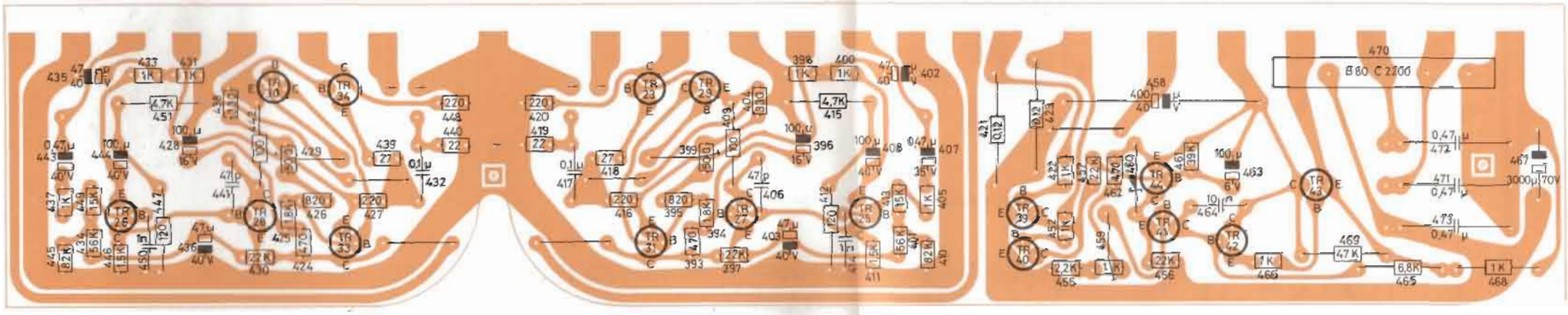


PC 6140131 / POTENTIOMETER



Ledningsfarver - Colour of wires - Kabelfarben					
bl	blå	-	blue	-	blau
br	brun	-	brown	-	braun
g	gul	-	yellow	-	gelb
gr	grøn	-	green	-	grün
grå	grå	-	grey	-	grau
hv	hvid	-	white	-	weiss
or	orange	-	orange	-	orange
r	rød	-	red	-	rot
s	sort	-	black	-	schwarz
v	violet	-	violet	-	violett

PC 8002101 / UDGANGSFORSTÆRKER / OUTPUT AMPLIFIER / LEISTUNGSVERSTÄRKER



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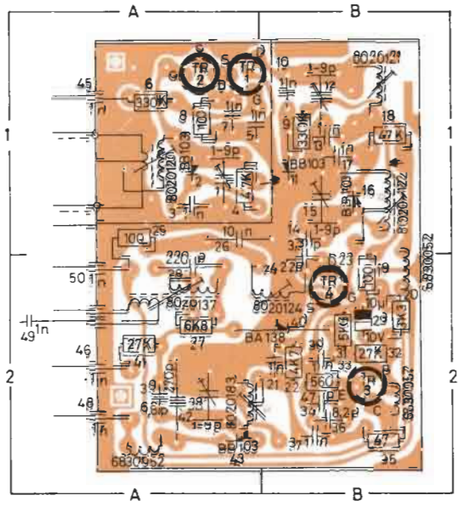
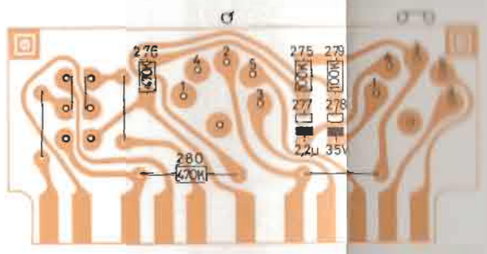
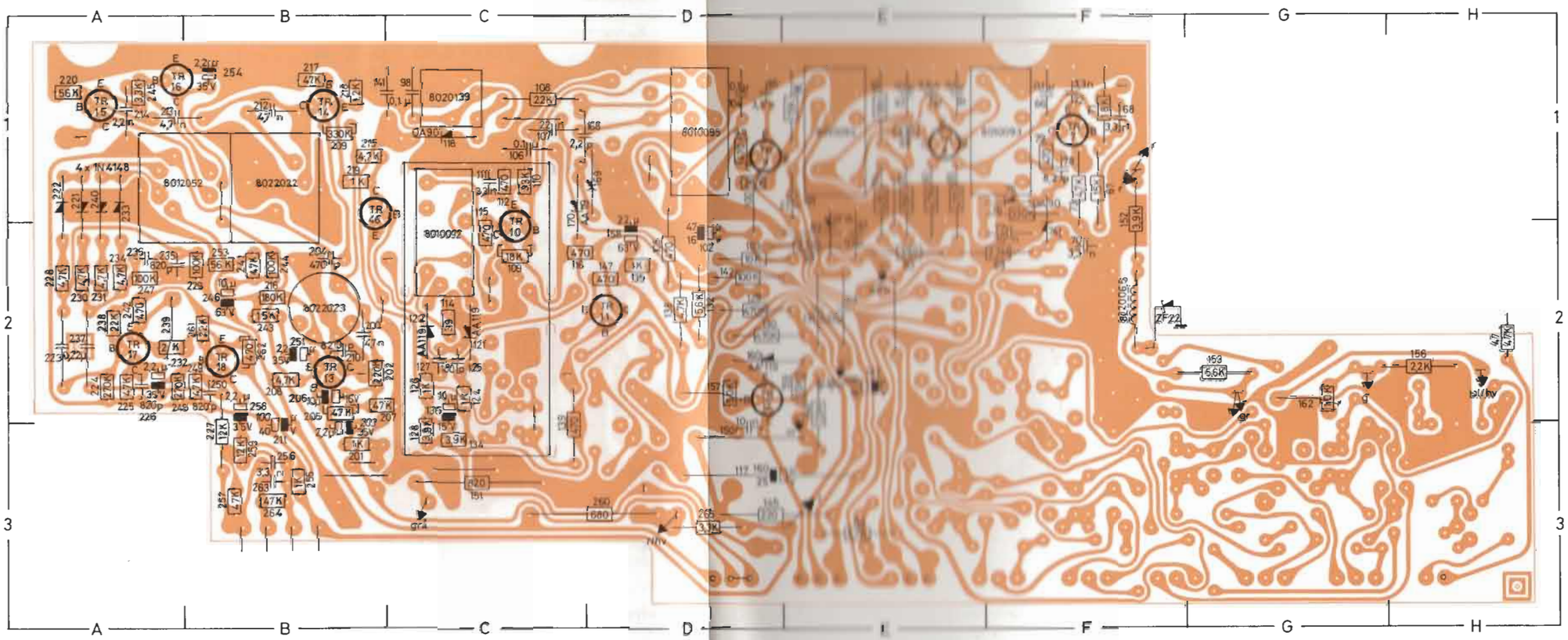
TUNER / FRONT END – 8050054



PC 8002067 / DIN STIK /
DIN SOCKET / DIN STECKER

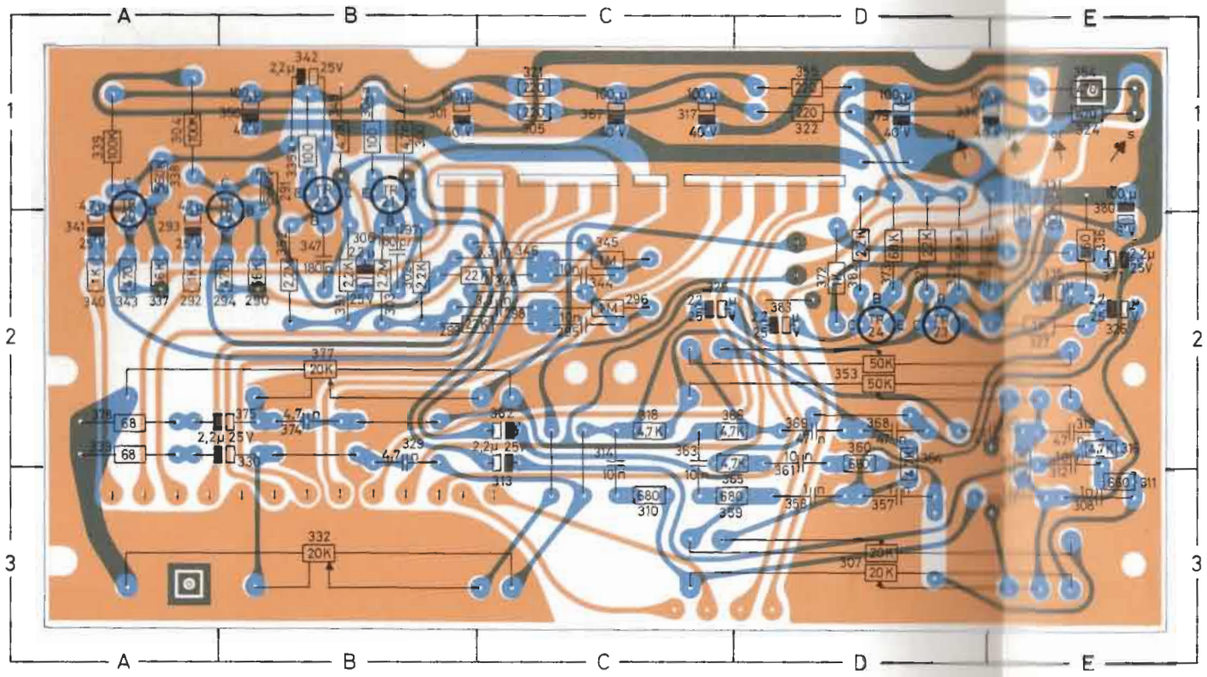


PC 8002096 / MF-DEKODER / IF DECODER / ZF DECODER

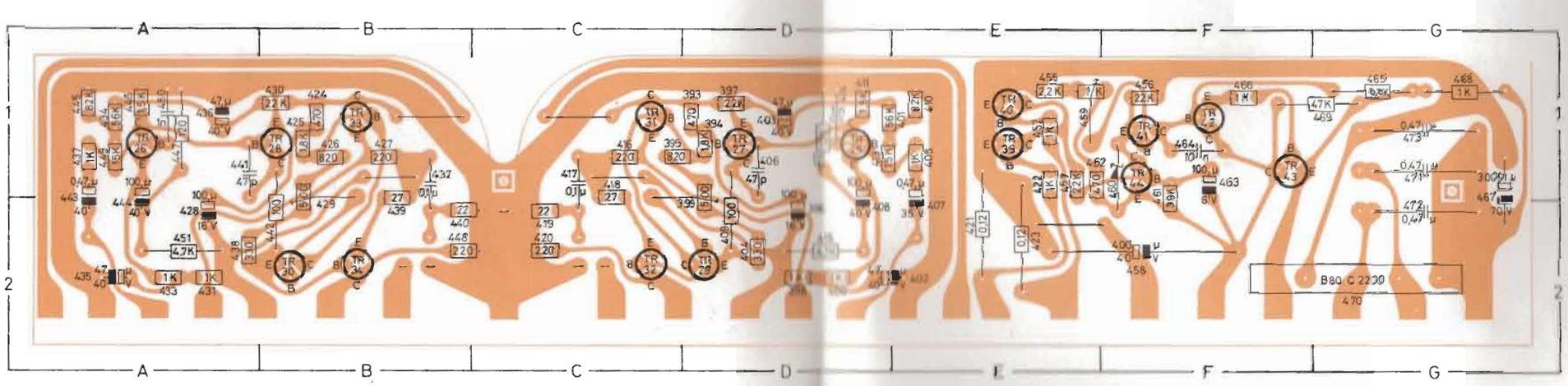


PC PLADER SET FRA KOMPONENTSIDE / SEEN FROM COMPONENT SIDE / PRINTPLATTEN VON DER BAUTEILSEITE AUS GESEHEN

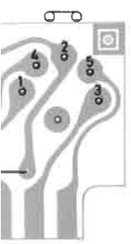
PC 8002071 / FORFORSTÆRKER / PRE-AMPLIFIER / VORVERSTÄRKER



PC 8002101 / UDGANGSFORSTÆRKER / OUTPUT AMPLIFIER / LEISTUNGSVERSTÄRKER

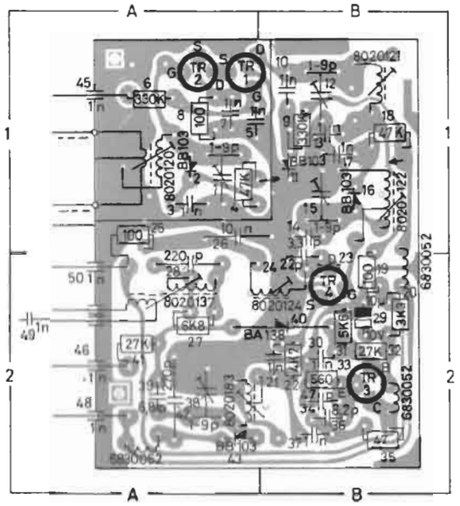


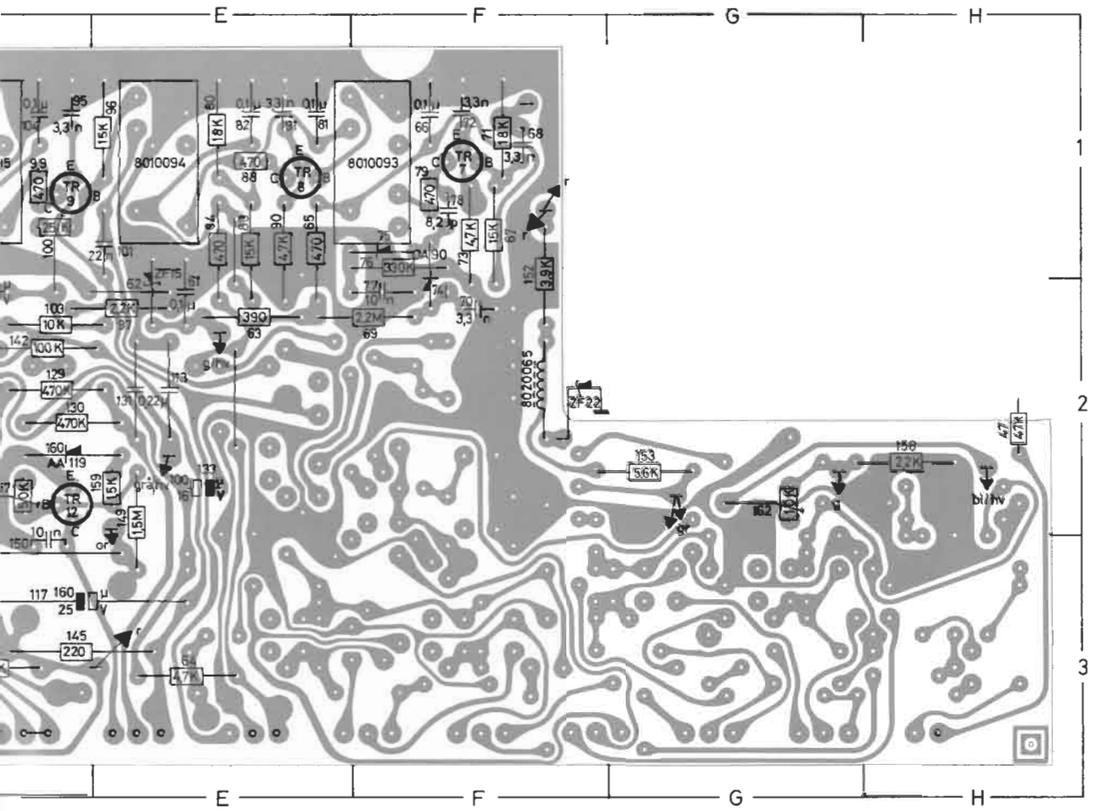
PC PLADER SET FRA KOMPONENTSIDE / SEEN FROM COMPONENT SIDE / PRINTPLATTEN VON DER BAUTEILSEITE AUS GESEHEN



KODER / IF-DECODER / ZF-DECODER

TUNER / FRONT END – 8050054





COMPONENT SIDE / PRINTPLATTEN VON DER BAUTEILSEITE AUS GESEHEN

PC 8002067 / DIN STIK / DIN SOCKET / DIN STECKER

Pos.		Index
275	100 kohm 5 % 1/8 W	5010049
276	470 kohm 5 % 1/8 W	5010077
279	100 kohm 5 % 1/8 W	5010049
280	470 kohm 5 % 1/8 W	5010077

Pos.		Index
277	2,2 µF 35 V	4201069
278	2,2 µF 35 V	4201069

Stikdåse 5 pol./Socket 5-contact/ Steckdose 5-polig	7212013
Omskifter/Switch/Umschalter	7402088

TUNER 8050054

Pos. nr.	Plac.	Index
TR1	A1	8320119
TR2	A1	8320119
TR3	B2	8320112
TR4	B2	8320136

Pos. nr.	Plac.	Index
2	A1	8300050
11	B1	8300041
16	B1	8300041
40	B2	8300032
43	A2	8300050

Index	Plac.	
6830052	A2	3,8 µH 5 %
6830052	B2	3,8 µH 5 %
6830052	B2	3,8 µH 5 %
8020120	A1	
8020121	B1	
8020122	B1	
8020124	B2	10,7 MHz
8020137	A2	10,7 MHz
8020183	A2	

Ferritkerne/ Ferritcore r	6702008
Ferritkerne/ Ferritcore hv	6702001

Pos. nr.	Plac.		Index
4	A1	47 kohm 10 % 1/2 W	5001050
6	A1	330 kohm 10 % 1/2 W	5001062
8	A1	100 ohm 10 % 1/2 W	5001013
9	B1	330 kohm 10 % 1/2 W	5001062
18	B1	47 kohm 10 % 1/2 W	5001050
19	B2	100 ohm 10 % 1/2 W	5001013
20	B2	3,3 kohm 5 % 1/8 W	5010076
22	B2	4,7 kohm 10 % 1/2 W	5001038
25	A1	100 ohm 10 % 1/2 W	5001013
27	A2	6,8 kohm 10 % 1/2 W	5001040
31	B2	5,6 kohm 5 % 1/8 W	5010041
32	B2	27 kohm 5 % 1/8 W	5010141
33	B2	560 ohm 5 % 1/8 W	5010067
35	B2	47 ohm 5 % 1/8 W	5010411
41	A2	27 kohm 10 % 1/2 W	5001047

Pos. nr.	Plac.		Index
1	A1	1 - 9 pF	4330001
3	A1	1 nF – 20 + 50 % 400 V	4010008
5	A1	1 nF – 20 + 50 % 400 V	4010008
7	A1	1 nF – 20 + 50 % 400 V	4010008
10	B1	1 nF – 20 + 50 % 400 V	4010008
12	B1	1 - 9 pF	4330001
13	B1	1 nF – 20 + 50 % 400 V	4010008
14	B1	3,3 pF ± 0,25 pF 400 V	4003012
15	B1	1 - 9 pF	4330001
17	B1	1 nF – 20 + 50 % 400 V	4010008
21	B2	1 nF – 20 + 50 % 400 V	4010008
24	B2	22 pF 5 % 250 V	4003059
26	A1	10 nF 20 % 250 V	4130081
28	A2	220 pF 5 % 63 V	4101007
29	B2	10 uF 10 V	4200107
30	B2	1 nF – 20 + 50 % 400 V	4010008
34	B2	47 pF 2 % 63 V	4003130
36	B2	8,2 pF ± 0,25 pF 63 V	4000015
37	B2	1 nF – 20 + 50 % 400 V	4010008
38	A2	1 - 9 pF	4330001
39	A2	6,8 pF ± 0,5 pF 400 V	4005004
42	A2	270 pF 5 % 63 V	4101031
45	A1	1 nF 250 V	4010018
46	A2	1 nF 250 V	4010018
48	A2	1 nF 250 V	4010018
49	A2	1 nF – 20 + 50 % 400 V	4010008
50	A 2	1 nF 250 V	4010018

PC 8002096 / MF-DEKODER IF-DECODER / ZF-DECODER

Pos.	Plac.	Index
TR 7	F1	8320089
TR8	E1	8320089
TR9	D1	8320089
TR10	C2	8320089
TR11	D2	8320095
TR12	D2	8320124
TR13	B2	8320097
TR14	B1	8320097
TR15	A1	8320097
TR16	A1	8320124
TR17	A2	8320097
TR18	B2	8320097
TR46	B1	8320056

PC 8002096 / MF-DEKODER / IF-DECODER / ZF-DEKODER

Pos.	Plac.		Index
62	E2	ZF 15	8300053
74	F2	OA 90	8300009
75	F1	OA 90	8300009
118	C1	OA 90	8300009
121/122	C2	AA 119	8300000
160	D2	AA 119	8300024
169	D1	AA 119	8300024
170	C1	AA 119	8300024
221	A1	IN 4148	8300058
222	A1	IN 4148	8300058
233	A1	IN 4148	8300058
240	A1	IN 4148	8300058
	F2	ZF 22	8300033

Pos.	Plac.		Index
47	H2	47 kohm 5 % 1/8 W	5010045
63	E2	390 ohm 10 % 1/2 W	5001022
64	E3	4,7 kohm 10 % 1/2 W	5001038
65	E1	470 ohm 10 % 1/2 W	5001024
67	F1	15 kohm 10 % 1/2 W	5001044
69	F2	2,2 Mohm 10 % 1/2 W	5001073
71	F1	18 kohm 10 % 1/2 W	5001045
73	F1	4,7 kohm 10 % 1/2 W	5001038
76	F1	330 kohm 10 % 1/2 W	5001062
79	F1	470 ohm 10 % 1/2 W	5001024
80	E1	18 kohm 10 % 1/2 W	5001045
83	E1	15 kohm 10 % 1/2 W	5001044
84	E1	470 ohm 10 % 1/2 W	5001024
88	E1	470 ohm 10 % 1/2 W	5001024
90	E1	4,7 kohm 10 % 1/2 W	5001038
96	E1	15 kohm 10 % 1/2 W	5001044
97	E2	2,2 kohm 5 % 1/8 W	5010064
99	D1	470 ohm 10 % 1/2 W	5001024
100	D1	25 kohm 20 % LIN.	5370068
103	D2	10 kohm 10 % 1/2 W	5001042
105	D2	470 ohm 10 % 1/2 W	5001024
108	C1	22 kohm 10 % 1/2 W	5001046
109	C2	18 kohm 10 % 1/2 W	5001045
110	C1	3,3 kohm 10 % 1/2 W	5001036
112	C1	470 ohm 10 % 1/2 W	5001024
114	C2	39 ohm 10 % 1/2 W	5001007
115	C2	470 ohm 10 % 1/2 W	5001024
116	C2	470 ohm 10 % 1/2 W	5001024
124	C2	1 kohm 10 % 1/2 W	5001029
126	C2	1 kohm 10 % 1/2 W	5001029
128	C3	3,9 kohm 10 % 1/2 W	5001037
129	D2	470 kohm 10 % 1/2 W	5001065
130	D2	470 kohm 10 % 1/2 W	5001065
132	D2	5,6 kohm 5 % 1/8 W	5010041
134	C3	3,9 kohm 10 % 1/2 W	5001037
135	D2	1 kohm 10 % 1/2 W	5001029
138	D2	4,7 kohm 5 % 1/8 W	5010048
139	C3	470 ohm 10 % 1/2 W	5001024
142	D2	100 kohm 5 % 1/8 W	5010049
145	D3	220 ohm 10 % 1 W	5002017
147	D2	470 ohm 10 % 1/2 W	5001024
149	E2	1,5 Mohm 10 % 1/2 W	5001071
151	C3	820 ohm 10 % 1 W	5002023
152	F1	3,9 kohm 5 % 1/8 W	5010069
153	G2	5,6 kohm 5 % 1/8 W	5010041
162	G2	10 kohm 20 % LIN	5370074
201	B3	1 kohm 10 % 1/2 W	5001029
202	B2	220 kohm 10 % 1/2 W	5001059
205	B2	47 kohm 10 % 1/2 W	5001050
207	C2	47 kohm 10 % 1/2 W	5001050
208	B2	4,7 kohm 10 % 1/2 W	5001038
209	B1	330 kohm 10 % 1/2 W	5001062

Pos.	Plac.		Index
215	B1	4,7 kohm 10 % 1/2 W	5001038
216	B2	180 kohm 5 % 1/8 W	5010072
217	B1	47 kohm 10 % 1/2 W	5001050
218	B1	1,2 kohm 10 % 1/2 W	5001030
219	B1	1 kohm 10 % 1/2 W	5001029
220	A1	56 kohm 10 % 1/2 W	5001051
224	A2	270 kohm 10 % 1/2 W	5001060
225	A2	4,7 kohm 10 % 1/2 W	5001038
227	B3	12 kohm 10 % 1/2 W	5001043
228	A2	4,7 kohm 10 % 1/2 W	5001038
229	B2	100 kohm 10 % 1/2 W	5001055
230	A2	4,7 kohm 10 % 1/2 W	5001038
231	A2	4,7 kohm 10 % 1/2 W	5001038
234	A2	4,7 kohm 10 % 1/2 W	5001038
238	A2	22 kohm 5 % 1/8 W	5010079
239	A2	2 kohm 20 % LIN.	5370006
241	B2	47 kohm 10 % 1/2 W	5001050
242	A2	470 ohm 5 % 1/8 W	5010058
243	B2	15 kohm 10 % 1/2 W	5001044
244	B2	100 kohm 10 % 1/2 W	5001055
245	A1	3,3 kohm 10 % 1/2 W	5001036
247	A2	100 kohm 10 % 1/2 W	5001055
248	A2	270 kohm 10 % 1/2 W	5001060
249	B2	4,7 kohm 10 % 1/2 W	5001038
253	B2	56 kohm 10 % 1/2 W	5001051
255	B3	1 kohm 10 % 1/2 W	5001029
257	B3	47 kohm 10 % 1/2 W	5001050
259	B3	12 kohm 10 % 1/2 W	5001043
260	D3	680 ohm 10 % 1 W	5002077
261	B2	22 kohm 5 % 1/8 W	5010079
262	B2	470 ohm 5 % 1/8 W	5010058
264	B3	47 kohm 10 % 1/2 W	5001050
265	D3	3,3 kohm 10 % 1/2 W	5001036

Pos.	Plac.		Index
61	E2	0,1 µF 20 %	4133001
66	F1	0,1 µF 20 %	4133001
68	F1	3,3 nF 10 % 100 V	4011025
70	F2	3,3 nF 10 % 100 V	4011025
72	F1	3,3 nF 10 % 100 V	4011025
77	F2	10 nF 20 % 250 V	4130081
78	F1	8,2 pF ± 0,5 pF 400 V	4003036
81	E1	0,1 µF 20 %	4133001
82	E1	0,1 µF 20 %	4133001
91	E1	3,3 nF 10 % 100 V	4011025
95	A1	3,3 nF 10 % 100 V	4011025
98	C1	0,1 µF 20 %	4133001
101	E1	22 nF 20 % 250 V	4130079
102	D2	47 µF 16 V	4200092
104	D1	0,1 µF 20 %	4133001
106	C1	0,1 µF 20 %	4133001
107	C1	22 nF 20 %	4133004
111	C1	3,3 nF 10 % 100 V	4011025
113	E2	0,22 µF 20 %	4133006
117	D3	160 µF 25 V	4200072
125	C2	180 pF 10 % 100 V	4010029
127	C2	180 pF 10 % 100 V	4010029
131	E2	0,22 µF 20 %	4133006
133	E2	100 µF 35 V	4201060
136	C2	10 µF 16 V	4200101
141	B1	0,1 µF 20 %	4133001
150	D3	10 nF – 20 + 100 % 40 V	4010041
168	D1	2,2 pF ± 0,25 pF 400 V	4003005
200	B2	4,7 nF 10 % 63 V	4101006
203	B3	2,2 µF 35 V	4201069
204	B2	470 pF 10 % 100 V	4010024
206	B2	10 µF 16 V	4200101
210	B2	820 pF 10 % 100 V	4010033
211	B3	100 µF 35 V	4201060
212	B1	4,7 nF 10 % 63 V	4101006
213	A1	4,7 nF 10 % 63 V	4101006
214	A1	2,2 nF 10 % 63 V	4101010
226	A2	820 pF 10 % 100 V	4010033
232	A2	2,2 µF 35 V	4201069
235	A2	820 pF 10 % 100 V	4010033
236	A2	820 pF 10 % 100 V	4010033
237	A2	0,22 µF 20 %	4133006

Pos.	Plac.		Index
246	B2	10 µF 63 V	4201065
250	B2	820 pF 10 % 100 V	4010033
251	B2	2,2 µF 35 V	4201069
254	B1	2,2 µF 35 V	4201069
256	B3	3,3 nF 10 % 100 V	4011025
258	B2	2,2 µF 35 V	4201069
263	B3	3,3 nF 10 % 100 V	4011025

Index	Plac.	
8010092	C2	FM DET. 10,7 MHz
8010093	F1	10,7 MHz
8010094	E1	10,7 MHz
8010095	D1	10,7 MHz
8012052	A1	38 KHz
8020065	F2	130 µH
8020139	C1	
8022022	B1	19 KHz
8022023	B2	19 KHz

Pos.	Plac.		Index
331	E1	10 kohm 5 % 1/8 W	5010059
332	B3	20 kohm + 10 g	5301013
333	A2	68 ohm 10 % 1/2 W	5001010
336	E2	560 ohm 10 % 1/2 W	5001025
337	A2	56 kohm 5 % 1/8 W	5010061
338	A1	560 kohm 5 % 1/8 W	5010071
339	A1	100 kohm 5 % 1/8 W	5010049
339a	B1	100 ohm 5 % 1/8 W	5010065
340	A2	1 kohm 5 % 1/8 W	5010040
343	A2	470 ohm 5 % 1/8 W	5010058
345	A2	1 Mohm 5 % 1/8 W	5010054
348	C2	22 kohm 5 % 1/8 W	5010079
349	B1	4,7 kohm 5 % 1/8 W	5010048
351	B2	2,2 kohm 5% 1/8 W	5010064
352	B2	2,2 Mohm 10 % 1/4 W	5011074
353	D2	2 x 50 kohm LIN.	5310025
354	E1	470 ohm 5 % 1/8 W	5010058
355	D1	220 ohm 5 % 1/8 W	5010092
359	C3	680 ohm 10 % 1/2 W	5001026
360	D2	680 ohm 10 % 1/2 W	5001026
364	D2	4,7 kohm 10 % 1/2 W	5001038
365	C3	4,7 kohm 10 % 1/2 W	5001038
366	C2	4,7 kohm 10 % 1/2 W	5001038
372	D2	1 kohm 5 % 1/8 W	5010040
373	D2	68 kohm 5 % 1/8 W	5010062
376	E1	10 kohm 5 % 1/8 W	5010059
378	A2	68 ohm 10 % 1/2 W	5001010
381	D2	560 ohm 10 % 1/2 W	5001025

PC 8002071 / FORFORSTÆRKER / PRE-AMPLIFIER / VORVERSTÄRKER

Pos.	Plac.	Index
TR19	B1	8320095
TR20	A1	8320095
TR21	B1	8320120
TR22	B1	8320120
TR23	D2	8320168
TR24	D2	8320168

Pos.	Plac.		Index
290	B2	56 kohm 5 % 1/8 W	5010061
291	B1	560 kohm 5 % 1/8 W	5010071
292	A2	1 kohm 5 % 1/8 W	5010040
294	B2	470 ohm 5 % 1/8 W	5010058
296	C2	1 Mohm 5 % 1/8 W	5010054
299	B2	22 kohm 5 % 1/8 W	5010079
300	B1	4,7 kohm 5 % 1/8 W	5010048
302	B2	2,2 kohm 5 % 1/8 W	5010064
303	B2	2,2 Mohm 10 % 1/4 W	5011074
304	A1	100 kohm 5 % 1/8 W	5010049
304a	B1	100 ohm 5 % 1/8 W	5010065
305	C1	220 ohm 5 % 1/8 W	5010092
307	D3	2 x 20 kohm LIN.	5310026
310	C3	680 ohm 10 % 1/2 W	5001026
311	E3	680 ohm 10 % 1/2 W	5001026
315	E2	4,7 kohm 10 % 1/2 W	5001038
316	E2	4,7 kohm 10 % 1/2 W	5001038
318	C2	4,7 kohm 10 % 1/2 W	5001038
321	C1	220 ohm 5 % 1/8 W	5010092
322	D1	220 ohm 5 % 1/8 W	5010092
323	D2	2,2 kohm 5 % 1/8 W	5010064
324	E1	470 ohm 5 % 1/8 W	5010058
327	E2	1 kohm 5 % 1/8 W	5010040
328	D2	68 kohm 5 % 1/8 W	5010062

Pos.	Plac.		Index
293	A2	4,7 µF 25 V	4200108
295	C2	10 nF 20 % 250 V	4130081
297	B2	180 pF 5 % 63 V	4101008
298	C2	3,3 nF 10 % 63 V	4101005
301	B1	100 µF 35 V	4201060
306	B2	2,2 µF 35 V	4201069
308	E3	1 nF 5 % 160 V	4102063
309	E3	1 nF 5 % 160 V	4102063
312	E2	10 nF 20 % 250 V	4130081
313	C3	2,2 µF 35 V	4201069
314	C2	10 nF 20 % 250 V	4130081
317	C1	100 µF 35 V	4201060
319	E2	47 nF 20 % 250 V	4130078
320	E2	47 nF 20 % 250 V	4130078
325	C2	2,2 µF 35 V	4201069
326	E1	2,2 µF 35 V	4201069
329	B2	4,7 nF 10 % 160 V	4201094
330	B2	2,2 µF 35 V	4201069
334	D1	100 µF 35 V	4201060
335	E2	100 µF 35 V	4201060
341	A2	4,7 µF 25 V	4200108
342	B1	2,2 µF 35 V	4201069
344	C2	10 nF 20 % 250 V	4130081
346	C2	3,3 nF 10 % 63 V	4101005
347	B2	180 pF 5 % 63 V	4101008
350	B1	100 µF 35 V	4201060
357	D3	1 nF 5 % 160 V	4102063
358	D3	1 nF 5 % 160 V	4102063
361	D3	10 nF 20 % 250 V	4130081
362	C2	2,2 µF 35 V	4201069
363	C2	10 nF 20 % 250 V	4130081
367	C1	100 µF 35 V	4201060
368	D2	47 nF 20 % 250 V	4130078
369	D2	47 nF 20 % 250 V	4130078
371	E2	2,2 µF 35 V	4201069
374	B2	4,7 nF 10 % 160 V	4102094
375	B2	2,2 µF 35 V	4201069
379	D1	100 µF 35 V	4201060
380	E1	100 µF 35 V	4201060
383	D2	2,2 µF 35 V	4201069

PC 8002101 / UDGANGSFORSTÆRKER / OUTPUT AMPLIFIER / LEISTUNGSVERSTÄRKER

Pos.	Plac.	Index
TR 25	D1	8320069
TR 26	A1	8320069
TR 27	D1	8320092
TR 28	B1	8320092
TR 29	D2	8320056
TR 30	B2	8320056
TR 31	C1	8320135
TR 32	C2	8320135
TR 33	B1	8320135
TR 34	B2	8320135
TR 39	E1	8320165
TR 40	E1	8320165
TR 41	F1	8320150
TR 42	F1	8320149
TR 43	F1	8320148
TR 44	F1	8320056

Pos.	Plac.		Index
460	F1	ZF 9,1	8300028
470	G2	B 80 C 2200	8310020

Pos.	Plac.		Index
393	D1	470 ohm 10 % 1/2 W	5001024
394	D1	1,8 kohm 10 % 1/2 W	5001033
395	C1	820 ohm 10 % 1/2 W	5001027
397	D1	22 kohm 5 % 1/8 W	5010079
398	D2	1 kohm 10 % 1/2 W	5001029
399	D1	500 ohm 20 % LIN.	5370002
400	D2	1 kohm 10 % 1/2 W	5001029
401	E1	56 kohm 5 % 1/8 W	5010061
404	D2	330 ohm 10 % 1/2 W	5001021
405	E1	1 kohm 10 % 1/2 W	5001029
409	D2	100 ohm 10 % 1/2 W	5001013
410	E1	82 kohm 5 % 1/8 W	5010091
411	D1	1,5 kohm 10 % 1/2 W	5001032
412	D1	120 ohm 5 % 1/8 W	5010128
413	D1	15 kohm 5 % 1/8 W	5010053
415	D2	4,7 kohm 10 % 1/2 W	5001038
416	C1	220 ohm 10 % 1/2 W	5001019
418	C1	27 ohm 10 % 1/2 W	5001005
419	C2	22 ohm 10 % 1/2 W	5001004
420	C2	220 ohm 10 % 1/2 W	5001019
421	E2	0,12 ohm 10 % 1W	5100095
422	E1	1 kohm 10 % 1/2 W	5001029
423	E2	0,12 ohm 10 % 1W	5100095
424	B1	470 ohm 10 % 1/2 W	5001024
425	B1	1,8 kohm 10 % 1/2 W	5001033
426	B1	820 ohm 10 % 1/2 W	5001027
427	B1	220 ohm 10 % 1/2 W	5001019
429	B2	500 ohm 20 % LIN.	5370002
430	B1	22 kohm 5 % 1/8 W	5010079
431	A2	1 kohm 10 % 1/2 W	5001029
433	A2	1 kohm 10 % 1/2 W	5001029
434	A1	56 kohm 5% 1/8 W	5010061
437	A1	1 kohm 10 % 1/2 W	5001029
438	A2	330 ohm 10 % 1/2 W	5001021
439	B2	27 ohm 10 % 1/2 W	5001005
440	B2	22 ohm 10 % 1/2 W	5001004
442	B2	100 ohm 10 % 1/2 W	5001013
445	A1	82 kohm 5 % 1/8 W	5010091
446	A1	1,5 kohm 10 % 1/2 W	5001032
447	A1	120 ohm 5 % 1/8 W	5010128
448	B2	220 ohm 10 % 1/2 W	5001019
449	A1	15 kohm 5 % 1/8 W	5010053
451	A2	4,7 kohm 10 % 1/2 W	5001038
452	E1	1 kohm 10 % 1/2 W	5001029

Pos.	Plac.		Index
455	E1	2,2 kohm 10 % 1/2 W	5001034
456	F1	22 kohm 10 % 1/2 W	5001046
457	E1	22 kohm 10 % 1/2 W	5001046
459	E1	1 kohm 20 % LIN.	5370050
461	F1	39 kohm 10 % 1/2 W	5001049
462	E1	470 ohm 10 % 1/2 W	5001024
465	G1	6,8 kohm 10 % 1/2 W	5001040
466	F1	1 kohm 10 % 1/2 W	5001029
468	G1	1 kohm 10 % 1/2 W	5001029
469	G1	47 kohm 10 % 1/2 W	5001050

Pos.	Plac.		Index
396	D2	100 µF 16 V	4200099
402	E2	47 µF 40 V	4201074
403	D1	47 µF 40 V	4201074
406	D1	47 pF 2 % 63 V	4000063
407	E2	0,47 µF 35 V	4201058
408	D2	100 µF 35 V	4201060
414	D1	1 nF 5 % 160 V	4202063
417	C1	0,1 µF 20 % 250 V	4130103
428	A2	100 µF 16 V	4200099
432	B1	0,1 µF 20 % 250 V	4130103
435	A2	47 µF 40 V	4201074
436	A1	47 µF 40 V	4201074
441	A1	47 pF 2 % 63 V	4000063
443	A2	0,47 µF 35 V	4201058
444	A2	100 µF 35 V	4201060
450	A1	1 nF 5 % 160 V	4202063
458	F2	470 µF 40 V	4201029
463	F1	100 µF 6,3 V	4200098
464	F1	10 nF 20 % 250 V	4130081
467	G1	3000 µF 70 V	4101086
471	G1	0,47 µF 10 % 250 V	4130029
472	G2	0,47 µF 10 % 250 V	4130029
473	G1	0,47 µF 10 % 250 V	4130029

PC 8002097 / OMSKIFTER / SWITCH / UMSCHALTER

Pos.		Index
144	560 ohm 10 % 1 W	5002022
168	820 ohm 10 % 1 W	5002023

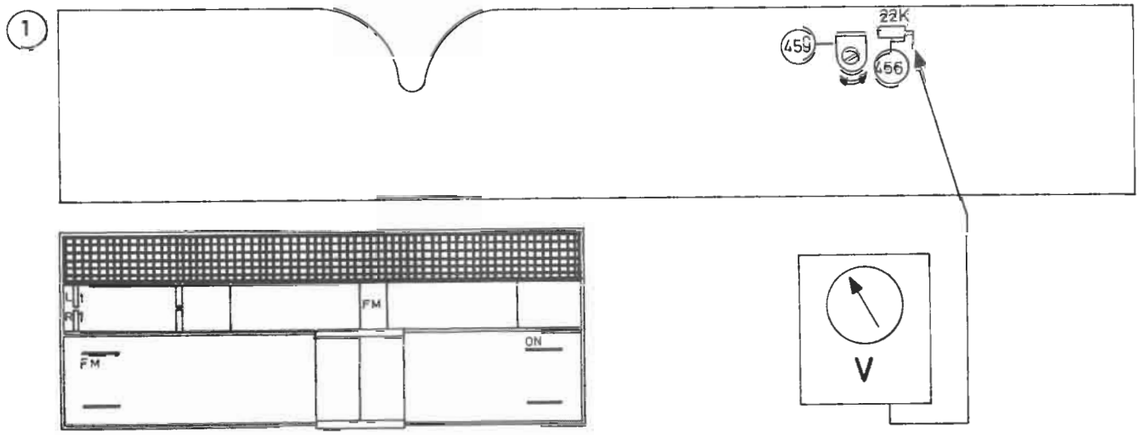
Pos.		Index
163	0,22 µF 35 V	4201072
165	0,22 µF 35 V	4201072
166	0,22 µF 35 V	4201072
167	0,22 µF 35 V	4201072

PC 0,3 mm 6140301

ADJUSTMENT PLAN

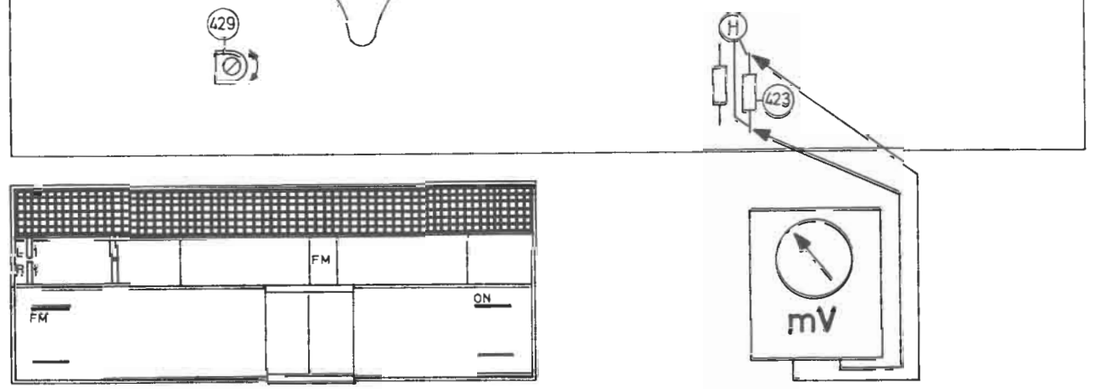
Voltage adjustment 1
Current adjustment . . . . . 2 - 3
Adjustment of emitter voltage of TR9 4
Adjustment of light 5
Adjustment of tuning voltage . . . . . 6 - 7
FM alignment . . . . . 8 - 10
Adjustment of decoder (1) . . . . . 11 - 13
Adjustment of decoder (2) . . . . . 14 - 15

1



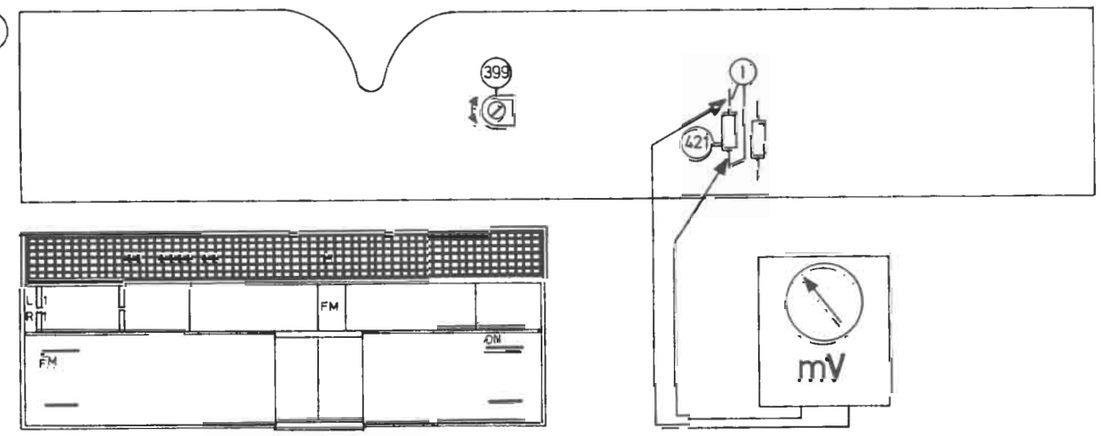
Adjust supply voltage to 33 volt. Volume control at minimum.

2



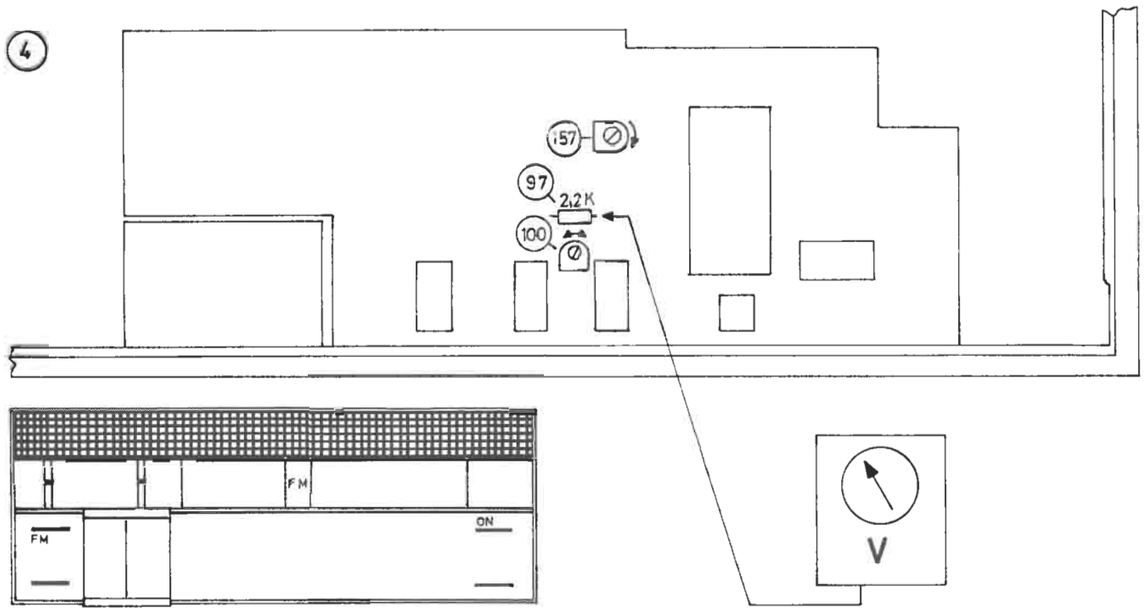
Adjust left-channel no-signal current so that meter reads 7.5 mV. Volume control at minimum.

3



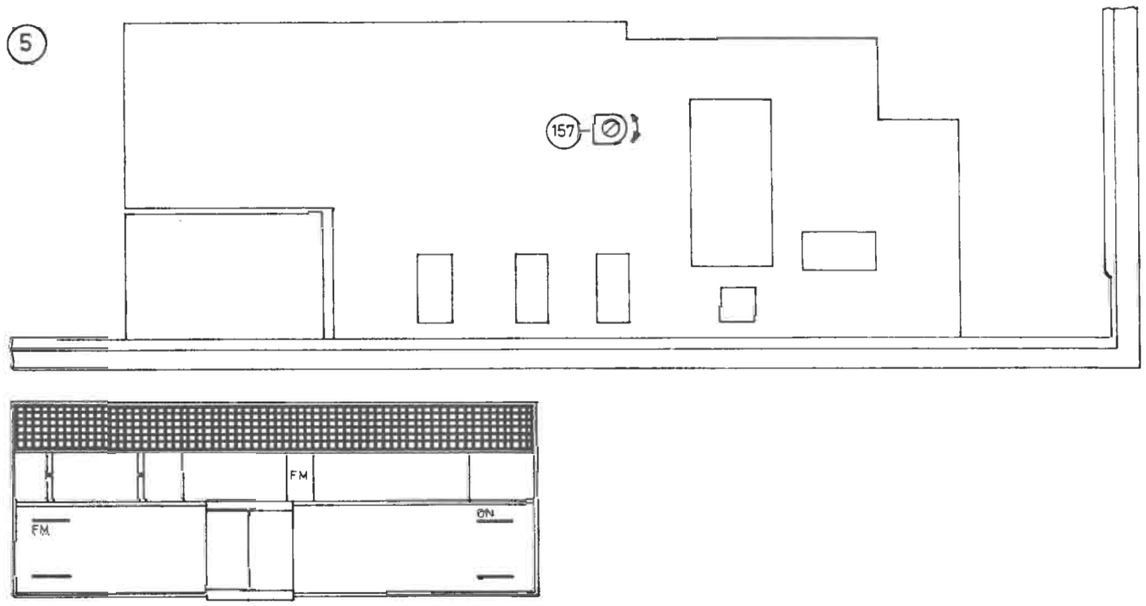
Adjust right-channel no-signal current so that meter reads 7.5 mV. Volume control at minimum.

4



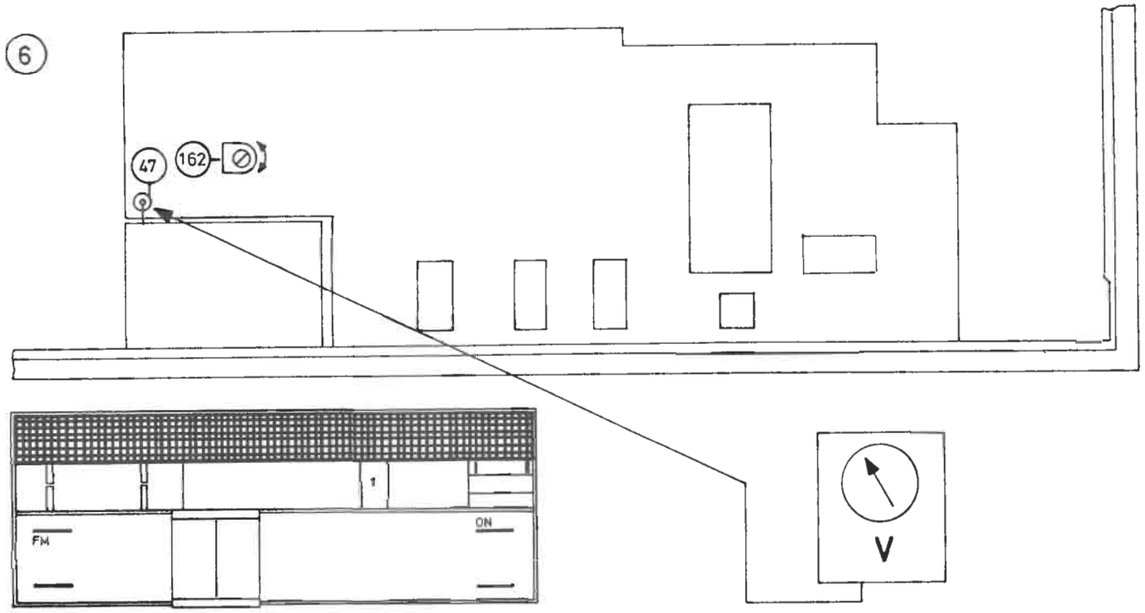
Adjustment of emitter voltage of TR9. Turn potentiometer (No. 157 in sketch above) fully clockwise.
Adjust potentiometer No. 100 to 9.8 volts.

5



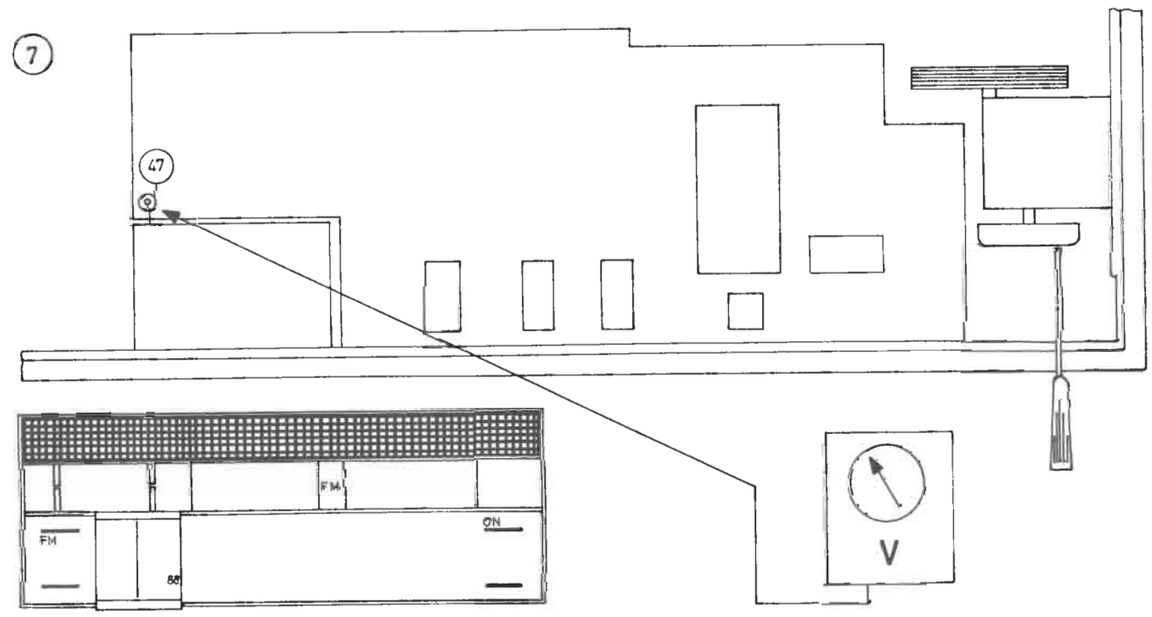
Adjustment of brightness. Adjust potentiometer No. 157 (see sketch above) for faint glow in indicator lamp.
Dial to be set outside station.

6

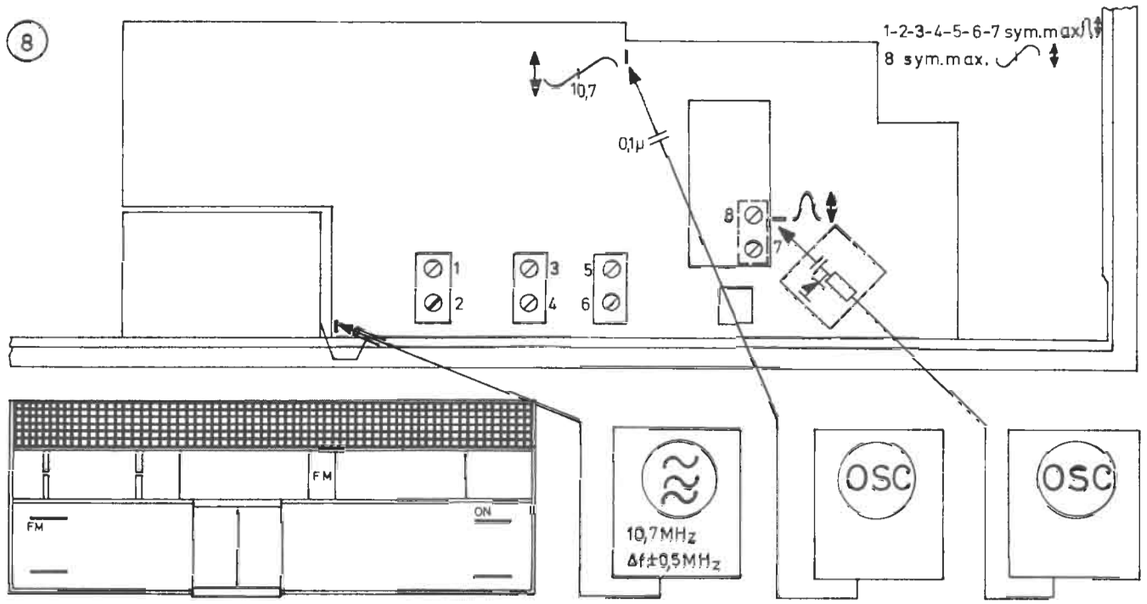


Adjustment of tuning voltage. Adjust potentiometer No. 162 for 4.5 volts. Dial potentiometer P1 all the way to the left.

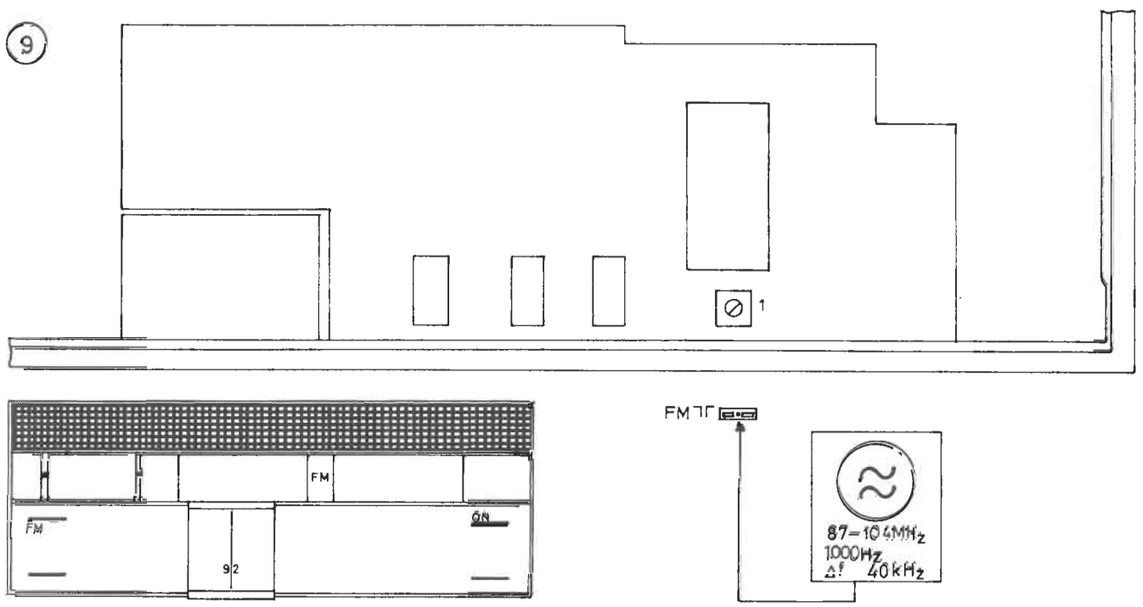
7



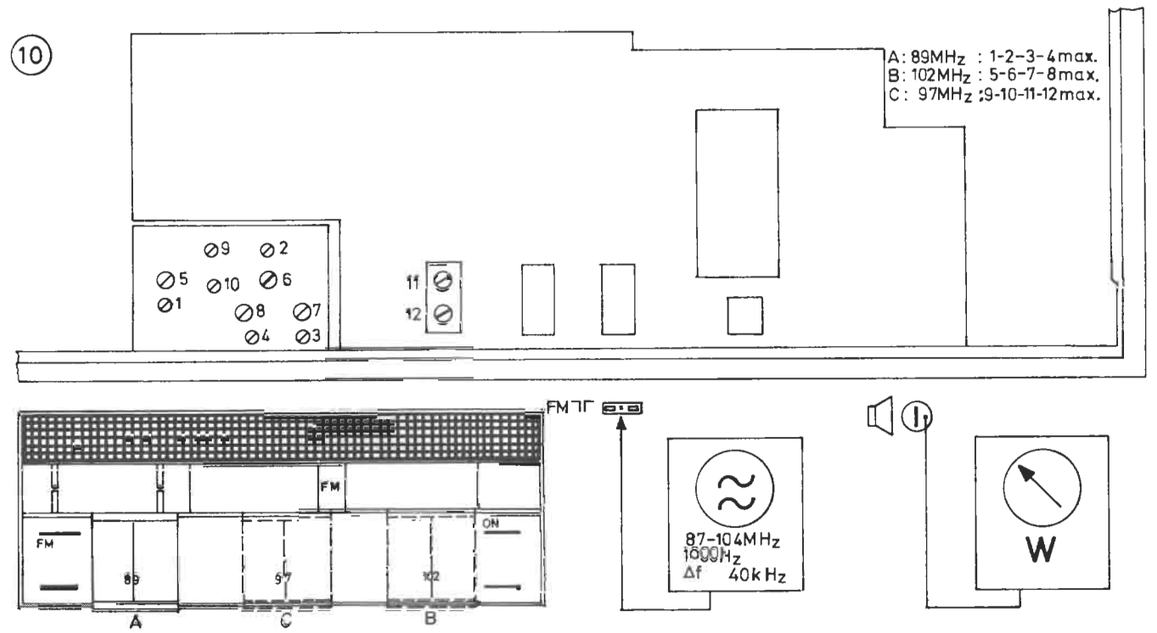
Adjustment of tuning voltage. Adjust tuning voltage potentiometer so that VTVM reads 4.5 volts. Dial all the way to the left.



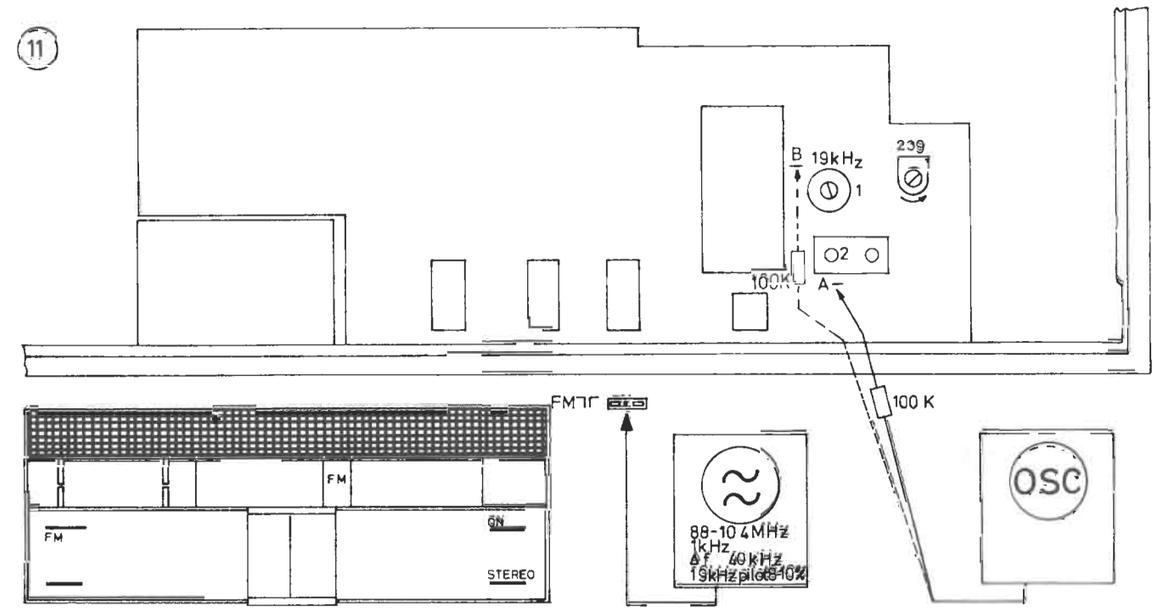
Alignment of FM IF.



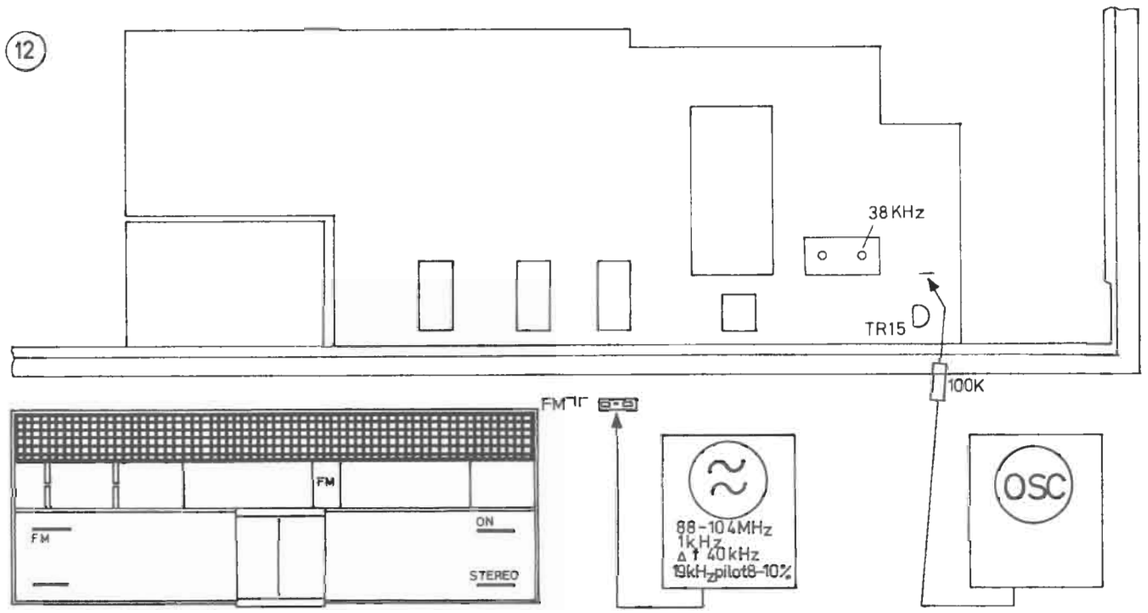
Adjust light indicator coil for max. FM indicator brightness.



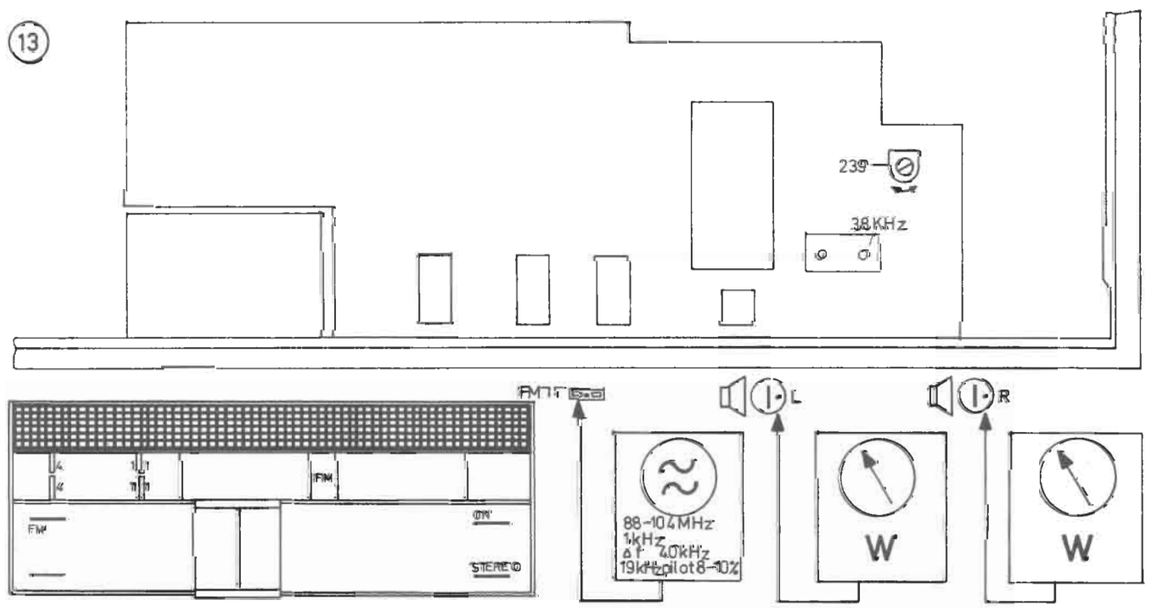
Alignment of FM front end. Realign 1 st. IF circuit.



Adjustment of 19 kHz circuits. Turn potentiometer No. 239 fully anti-clockwise. Adjust 1 and 2 for max. response; probe at point A. Readjust circuit No. 1; probe at point B.

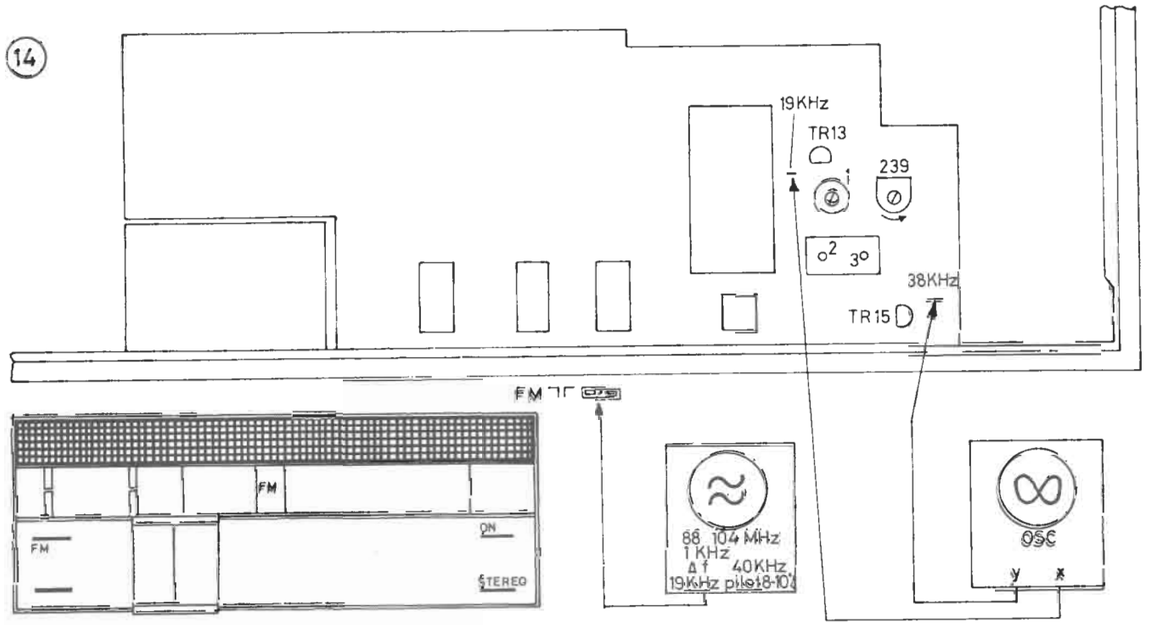


Adjustment of 38 kHz circuit. Adjust for max. response.



Adjustment of channel separation. Left channel modulated.
Adjust the 38 kHz coil for max. output in left channel. Adjust potentiometer No. 239 for min. output in right channel.

The stereo decoder can also be adjusted as shown on the below sketches.



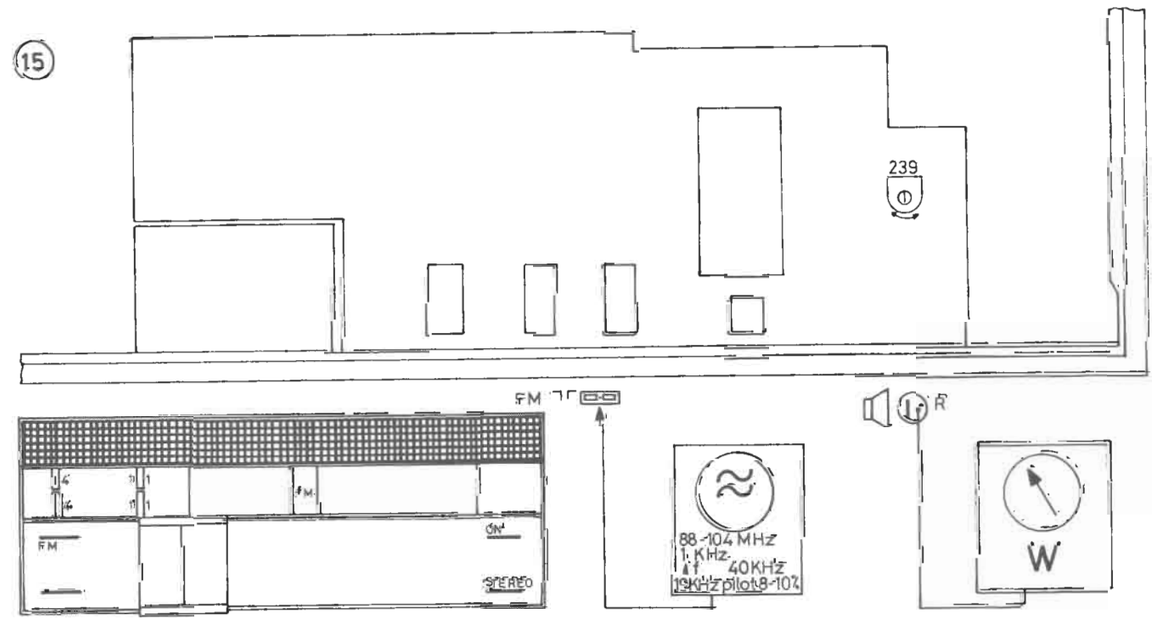
The oscilloscope must be supplied with an x- and a y-input. Turn potentiometer No. 239 fully anti-clockwise.
The x-input is connected to the 19 kHz signal on the collector of the TR13, and the y-input is connected to the 38 kHz signal on the collector of the TR15.

1 is adjusted to max. x-gain.

3 is adjusted to max. y-gain.

2 is adjusted to symmetric figure of eight.

The procedure is repeated.



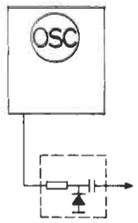
Adjustment of channel separation. Left channel modulated.
Adjust No. 239 for min. output in right channel.

SYMBOLS

Sweep generator. Shown here with a frequency swing of ± 0.5 MHz and modulated with 1000 Hz tone.

Signal generator. Shown modulated with 1000 Hz tone and with frequency swing of 40 kHz.

Stereo coder with frequency swing of 40 kHz, multiplex signal of 1 kHz and 8 - 10 % pilot tone.



Oscilloscope with diode probe.

Trimmer potentiometer.

Dust-iron cores, trimmer capacitors or potentiometers to be adjusted in numerical sequence.

Denotes tuning to maximum response.

PARTS LIST FOR BEOMASTER 1001, TYPE 2504

SCREW CHART

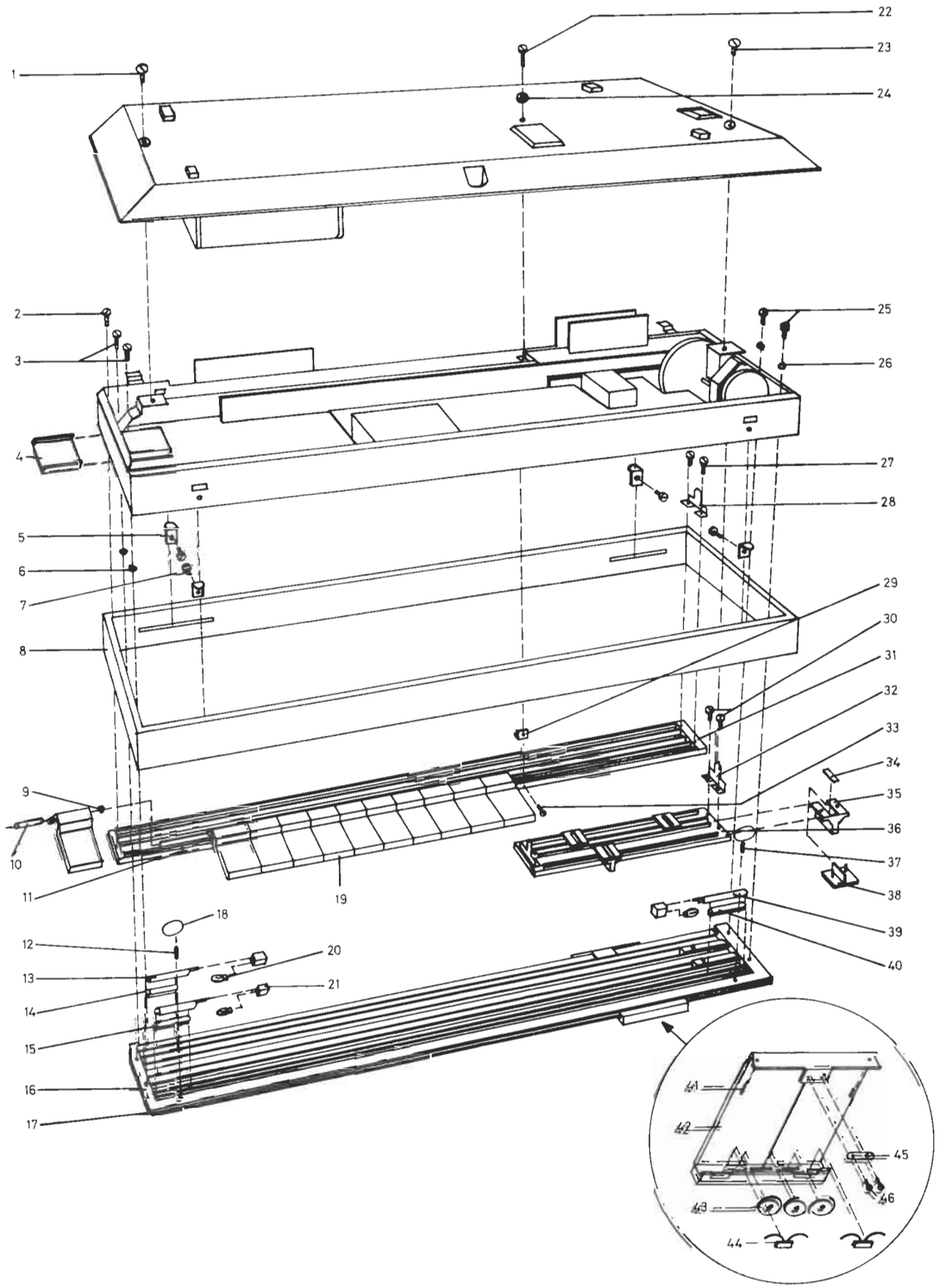
INDEX	DIN 63	DIN 84	ART 4260	ART 4261	ART 4270	ART 4271	DIN 438
2011201						2,18 x 6,35	
2011304					2,18 x 6,35		
2013000					2,84 x 6,35		
2013009			2,84 x 15,87				
2013202						2,84 x 9,52	
2013212				2,84 x 6,35			
2015212				3,50 x 6,35			
2034201		AM 2 x 2					
2034215		AM 2 x 8					
2034231		AM 2 x 4					
2038012	AM 3 x 10						
2038201		AM 3 x 3					
2038208		AM 3 x 5					
2038214		AM 3 x 8					
2038216		AM 3 x 10					
2038229		AM 3 x 18					
2038258		AM 3 x 5					
2038259		AM 3 x 8					
2038260		AM 3 x 12					
2038956	AM 3 x 4						
2042012	AM 4 x 6						
2042019	AM 4 x 6						
2042244		AM 4 x 8					
2072706							M 3 x 10

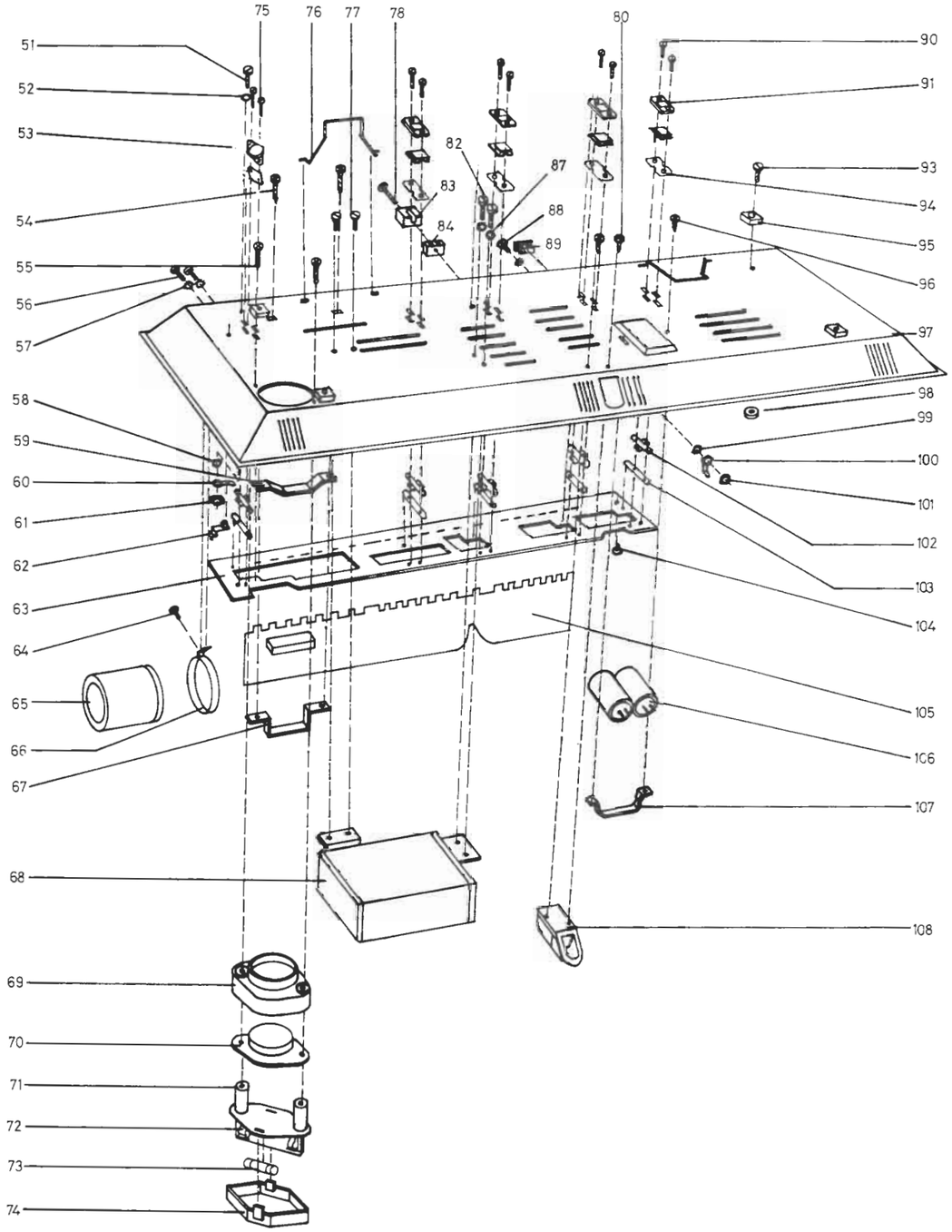
PARTS LIST FOR BEOMASTER 1001, TYPE 2504

Pos. nr.	Index	
1	2042019	Screw
2	2038208	Screw
3	2038208	Screw
4	3168033	Cover
5	2530161	Bracket
6	2625002	Tooth-lock washer
7	2038208	Screw
8	3410611	Cabinet, teak
	3410612	Cabinet, walnut
	3410613	Cabinet, rosewood
	3410615	Cabinet, white
9	2622107	Spacer
	2816064	Spring
10	3950246	Plastic profile
11	3950247	Plastic profile
12	2990030	Pin
13	3152026	Holder
14	3370037	Window, red
15	3370038	Window, green
16	3199034	Dial, silkscreen print
	3199045	Dial, anodized print
17	3950279	Plastic profile
18	3180035	Self adhesive label
19	2775225	Push button TAPE, silkscreen print
	2775283	Push button TAPE, anodized print
	2775226	Pushbutton PHONO, silkscreen print
	2775284	Pushbutton PHONO, anodized print
	2775227	Pushbutton MONO, silk screen print
	2775285	Pushbutton MONO, anodized print
	2775228	Pushbutton AMBIO, silk screen print
	2775286	Pushbutton AMBIO, anodized print
	2775229	Pushbutton AMBIO FILTER, silk screen print
	2775287	Pushbutton AMBIO FILTER, anodized print
	2775230	Pushbutton FM, silkscreen print
	2775288	Pushbutton FM, anodized print
	2775231	Pushbutton AFC OFF, silkscreen print
	2775289	Pushbutton, AFC OFF, anodized
	2775232	Pushbutton, P1 silk screen print
	2775290	Pushbutton, P1 anodized
	2775233	Pushbutton, P2 silk screen print
	2775291	Pushbutton, P2 anodized
	2775234	Pushbutton, P3 silk screen print
	2775292	Pushbutton, P3 anodized
	2775235	Pushbutton, OFF silk screen print
	2775293	Pushbutton, OFF anodized
20	8230023	Lamp 12 V 0,03 A
21	7201016	Socket for lamp
22	2038259	Screw
23	2042019	Screw
24	2622015	Washer
25	2038208	Screw
26	2625002	Tooth-lock washer
27	2034201	Screw
28	2816038	Bronze spring
29	2582027	Adjustment collar
30	2034201	Screw
31	3444043	Front panel
32	2816038	Bronze spring
33	2011304	Screw
34	2912025	Felt washer
36	3199033	Dial silkscreen print
	3199043	Dial anodized print
37	2990030	Pin
38	3015013	Slide for knob
39	3152026	Holder
40	3370037	Window, red
41	3015014	Pin
42	3190047	Slide pointer
43	2794032	Wheel for slide pointer
44	3015015	Guide plate
45	0287177	Clamp
46	2034231	Screw

Correct on page 4-2

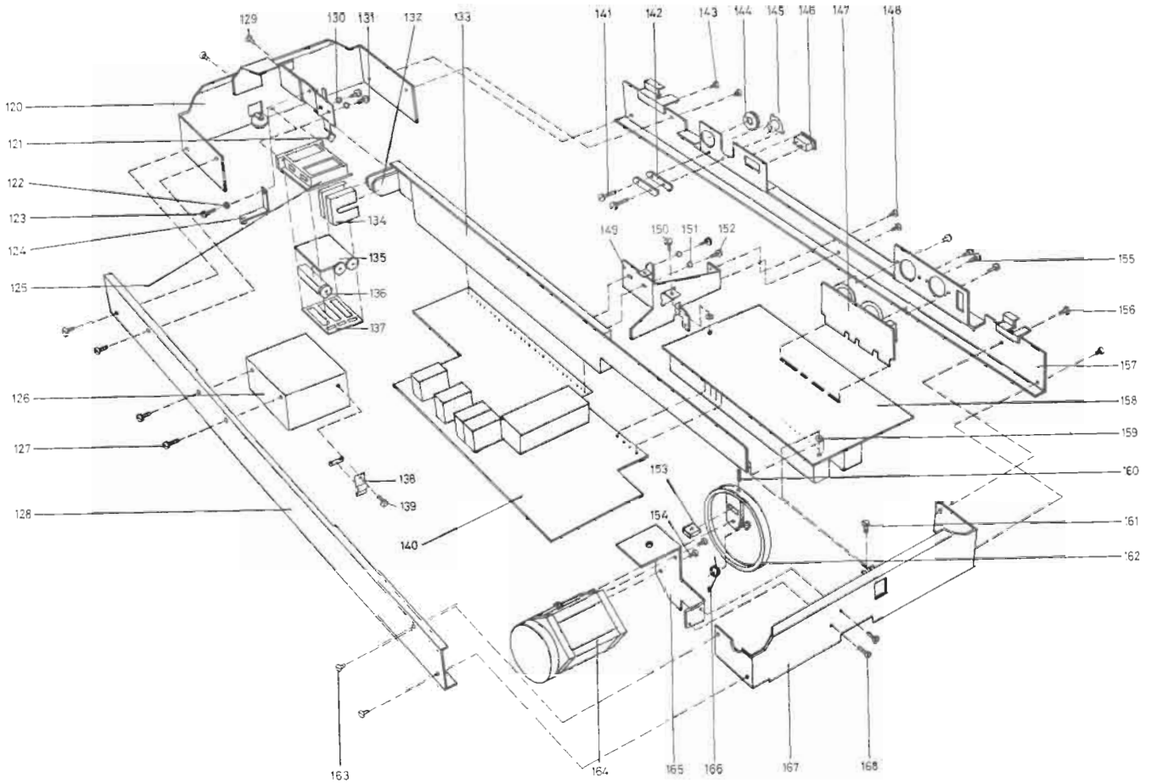
BEOMASTER 1001, TYPE 2504 35 2775218 Knob





Pos. nr.	Index	
51	2038259	Screw
52	2625002	Tooth-lock washer
53	3164086	Cover
54	2013202	Screw
55	2013009	Screw
56	2038258	Screw
57	2625002	Tooth-lock washer
58	2625002	Tooth-lock washer
59	2510060	Clamp
60	7530008	Solder tag
61	2380011	Nut
62	2515013	Clamp
63	6140139	PC board
64	2038258	Screw
65	4201086	El. capacitor 3000 µF/70 V
66	2514013	Clamp
67	2510061	Clamp
68	8013091	Mains transformer
69	0534106	Cover
70	7401001	Mains-voltage switch
71	3120194	Fuseholder
72	7500033	Bronze spring
73	6600006	Fuse, slow-acting, 1 A/250 V
74	3164066	Cover
75	2038012	Screw
76	2574029	Supporting springs
77	2042012	Screw
78	2038229	Screw
80	2015212	Screw
82	2042244	Screw
83	3152006	Holder
84	2576001	Spacer
87	2625003	Tooth-lock washer
88	2038259	Screw
89	7211047	Plug 2-contact DIN
90	2034215	Screw
91	3164027	Cover
93	2038260	Screw
94	3170047	Mica sheet
95	3035012	Plastic foot
96	2013202	Screw
97	3114049	Bottom
98	2389028	Nut
99	2625002	Tooth-lock washer
100	7530008	Solder tag
101	2380011	Nut
102	3172027	Insulating piece
103	7530045	Clamp
104	0462178	Pin
105	8002101	PC board
106	4200132	El. capacitor 3000 µF/25 V
107	2514012	Clamp
108	7212020	Jack socket
	3152027	Holder
	2013212	Screw

Pos. nr.	Index	
120	3470063	Bracket
121	2816045	Spring
122	2625002	Tooth-lock washer
123	2038208	Screw
124	2542223	Bracket
125	3131020	Housing
126	8050054	Tuner unit FM 87 - 104 MHz
127	2038201	Screw
128	3450126	Bracket
129	2013000	Screw
130	2625002	Tooth-lock washer
131	2038208	Screw
132	7452013	Switch
133	8002097	PC board
	8002098	Filter coil, AMBIO
	3152078	Lead holder
	2038208	Screw
134	3164144	Screen
135	6140131	PC board
136	5300059	Potentiometer 100 kohms
137	3199008	Dial
138	2510032	Clamp
139	2038201	Screw
140	8002096	PC board
141	2038216	Screw
142	0287155	Clamp
143	2038956	Screw
144	2938004	Bushing
145	7211041	Socket, 2-contact
	2364018	Rivet
146	7211042	Socket panel
147	8002067	PC board
148	2038956	Screw
149	2542191	Bracket
150	2038214	Screw
151	2625002	Tooth-lock washer
152	2038208	Screw
153	2380004	Square nut
154	2038956	Screw
155	2011201	Screw
156	2038956	Screw
157	3452168	Bracket
158	8002071	PC board
159	2622014	Fibre washer 3.2 X 6 X 1
160	2072706	Threaded pin AM 3 X 10
161	2038214	Screw
162	2724019	Cord Pulley
	3955001	Dial cord
163	2038956	Screw
164	4310009	Potentiometer 100 kohms
165	2542228	Bracket
166	0335149	Spring
167	3470064	Bracket
168	2038956	Screw

PARTS NOT SHOWN

6271047	Mains lead
3532085	Instruction diagram
3391327	Outer carton
3391354	Top/bottom inserts
3397135	Foam packing
3397136	Foam packing
8902010	Aerial
8920243	Suspension